CANCER RESEARCH

SUPPLEMENT NO. 1, 1953

NEGATIVE DATA FROM EXPERIMENTAL CANCER CHEMOTHERAPY STUDIES

Edited by

C. CHESTER STOCK

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FOREWORD

Many investigators are now engaged in screening compounds for their effect on neoplastic growths. Since the majority of compounds tested in these programs are ineffective, the publication of such data becomes a problem. Investigators and journals hesitate to publish such negative data. Yet to stimulate research and minimize a repetition of effort, such information must have wide distribution. This need was recognized, and an effort to meet it was announced in the March, 1952, issue of CANCER RESEARCH. At that time, it was planned to publish such negative data in tabular form in CANCER RESEARCH from time to time as the need arose. The response to this announcement soon revealed that the backlog of material was so great that publication by the installment plan would be time-consuming and difficult to index. The need of a special volume became evident, but this compilation did not become a reality until Dr. C. Chester Stock consented to assume the responsibility for collecting, classifying, and editing the available data. Appreciation is due to Dr. Stock for this important service, and also to Drs. Arthur Furst and Joseph Leiter who assisted him.

Harold P. Rusch
Editor-in-Chief
CANCER RESEARCH

INTRODUCTION

Investigators in experimental cancer chemotherapy owe much to Dr. Helen Dyer for her compilation of published data in their field. The usefulness of the compilation created additional interest in the publication of information which, for various reasons, could not be included in her Index of Tumor Chemotherapy. Some of the data were not available, because they represented compounds inadequately tested or that were commercially confidential, and most of them were more or less buried because of the negative results. Many compounds have been tested since the Dyer compilation. In fact, the intensive effort in experimental cancer chemotherapy during the past five years has caused increasing concern that there would be a larger and larger amount of unnecessary duplication as long as the data remained unpublished.

The excellent arrangement for the simple, rapid publication of negative data initiated a year ago (CANCER RESEARCH, 12: 241-42, 1952), upon the prompting of the California research groups, may in the future provide a method for rapid publication. However, as Dr. Rusch has indicated in the foreword, this could not handle the unpublished data accumulated since 1947. This supplement number of CANCER RESEARCH is the result. If there are sufficient interest and funds available, future supplements will be published as required. These may also provide for publication of negative results from clinical trials. Material proposed for possible future supplements should be sent to C. Chester Stock, 444 East 68th Street, New York 21, N. Y. If later supplements are not feasible, the material will be considered for publication in the form of that in the March, 1952, issue of CANCER RESEARCH. It is believed that supplement numbers containing negative data will easily save more than their cost if unnecessary repetitions of tumor tests on only 100 compounds can be prevented. In addition, the negative data will provide a degree of helpful information on the toxicities of hundreds of compounds.

The material included in the present supplement is that received in response to the invitation for data, which appeared in the August, 1952, issue of CANCER RESEARCH. It is to be noted that the information is presented under the title of negative data rather than negative compounds. It should be obvious that what are being reported are negative results under the specified conditions and that the same compounds under other conditions might show useful chemotherapeutic effects. It is assumed that each investigator submitting the data has assured himself of the lack of action of the compounds against the tumors employed and that the data, with the exception of controls, have not been published previously. Any questions concerning the data should be addressed directly to the investigators furnishing the information.

As the usefulness of the material is dependent in part upon its availability and promptness of appearance, the present publication has required a compromise of several factors including usefulness and the ease and speed of publication. Therefore, no attempt has been made to convert all names of the compounds to any standard form of nomenclature, such as that of CHEMICAL ABSTRACTS. To do so would have entailed too much delay in publication. An attempt has been made to eliminate any gross errors in the names of the compounds. An empirical formula index has been provided in the hope that it would be a useful guide to the entries for any compound in the supplement. In most instances the compounds have been listed alphabetically for each laboratory. In a few cases where they have been grouped according to structure, no attempt has been made to cross-index them. Abbreviations have been defined wherever not apparent or not in accordance with those of Dr. Dyer. Errors in an operation of this type are inevitable. An attempt has been made to reduce them to a minimum. Criticism and suggestions are invited by the undersigned publication committee.

It is a pleasure to acknowledge the assistance of Dr. Ralph Barclay, Mr. George Leopold, Miss Patricia Dunkel, and Miss Virginia Fairhurst in checking technical details, and that of Mrs. Mariam Anthony for the stenography.

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CONTENTS

SOME NEGATIVE SCREENING RESULTS WITH MISCELLANEOUS COMPOUNDS IN TISSUE CULTURES OF SEVERAL TUMORS

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A variety of chemical agents has been tested for selective toxicity to neoplastic cells in tissue culture, as part of the comprehensive program in experimental chemotherapy of the Sloan-Kettering Institute for Cancer Research. Many of these agents have displayed no material difference in toxicity to mouse sarcoma and embryonic cells. The great majority of a group of 96 purines and 28 purine nucleosides previously reported on (1) fell into this indifferent group. An example of a compound showing a high differential toxicity is 2,6-diaminopurine (2).

It is the purpose of the present paper to present data on miscellaneous chemical agents of non-differential toxicity in a tissue culture test. It should be obvious that the negative results with any compound reported here are valid only for the particular tumor and normal tissue used and under the conditions employed. There is no reason to assume general applicability to these results.

The procedure followed has been given in detail before (1,2) and is only summarized here. It involves an overnight testing of agents for morphological damage to cells of mouse tumors and mouse embryonic skin cultivated in the same roller tubes for 24 hours before addition of the agent to be tested. Each agent was added in a series of concentrations to the culture medium in a replacement volume of one-tenth of the one milliliter of fluid medium in each tube. The mouse tumors used have been sarcoma T241, Crocker sarcoma 180, and the Ma387 tumor. The outgrowth from explants of embryonic mouse abdominal skin ordinarily includes both fibroblastic and epithelial elements.

The vehicle employed was largely saline in every case. Some agents were preliminarily dissolved in small volumes of dilute HCl or NaOH before addition to saline. Some of the agents were added to the culture tubes as fine suspensions in saline, especially in the highest "concentrations" employed.

Because of the use throughout of embryonic mouse skin as the source of normal cells, and of saline as the vehicle, these are not entered in the table.

ACKNOWLEDGEMENT

The experiments whose results are reported here were carried out over a number of years with the able assistance of Miss Ruth Berger, Mrs. Marilyn Clarke Slautterback, Mrs. Anne Yates Wilson, and Miss Grace Cohn.

This study was aided in part by grants from the American Cancer Society and the Damon Runyon Memorial Fund for Cancer Research, and by grant C678 from the National Cancer Institute, of the National Institutes of Health, Public Health Service.

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2. Biesele, J. J.: Berger, R. E.: Wilson, A. Y.: Hitchings, G. H.: and Elion, G. B. Studies on 2,6-Diaminopurine and Related Substances in Cultures of Embryonic and Sarcomatous Rodent Tissues. Cancer, 4: 186-197, 1951

ENTRY NO.	COMPOUND NAME	SOURCE	TUMOR	DOSE RANGE (mM/l)
	BENZIMIDAZOLES:			
1	Benzimidazole	BE	S180	0.16 - 10.0
2	5,6-Dimethyl-1-β-d-glucopyranosyl-benzimidazole	AW6	S180	0.125 - 4.0
3	5,6-Dimethyl-1-β-d-ribofuranosyl-benzimidazole	AW6	S180	0.1 - 10.0
4	1-d-Glucopyranosylbenzimidazole	AW6	S180	0.125 - 2.0
5	2,2'-Hydroxyethyl benzimidazole	E	S180	0.25 - 4.0
6	2-Mercaptobenzimidazole	AA	S180	0.25 - 4.0
7	1-β-d-Ribofuranosylbenzimidazole	AW6	S180	0.125 - 4.0
	PENICILLIN AND RELATED COMPOUNDS			
8	N-Acetyl-DL-penicillamine	BY	T241	0.05 - 5.0
9	α-Benzylamide of D-benzylpenicilloic acid	BY	T241	0.05 - 5.0
10	S-Benzylpenicillamine (L)	BY	T241	0.05 - 5.0
11	Benzylpenillic acid	BY	T241	0.05 - 5.0
12	Benzylpenicilloic acid from D-penicillamine	BY	S180	0.05 - 5.0
13	p-Chlorobenzyl penicillin	N	T241	3.6 - 7.2
14	Cyclopentylmethyl penicillin	N	T241	3.07 - 6.14
15	α,β-Dimethyl-D-a-benzylpenicilloate	BY	S180	0.05 - 5.0
16	Ethylmercaptomethyl penicillin	N	T241	3.1 - 6.3
17	m-Fluorobenzyl penicillin	N	T241	2.8 - 5.7
18	o-Fluorophenylmethyl penicillin	N	T241	2.9 - 5.7
19	N-Formyl D-penicillamine	BY	S180	0.05 - 5.0
20	N-Formyl L-penicillamine	BY	S180	0.05 - 5.0
21	Isoamyloxymethyl penicillin	N	T241	0.58 - 2.9
22	Isopropylthiomethyl penicillin	N	T241	4.3 - 8.6
23	N-Methyl L-penicillamine disulfide	BY	S180	0.05 - 5.0
24	Penicillin O potassium, crystalline	BY	T241	0.02 - 2.0
25	β-Phenoxyethylmercaptomethyl penicillin	N	T241	2.4 - 4.9
26	2-Thiophenemethyl penicillin	N	T241	2.9 - 5.9
	PTERIDINES			
27	2-Amino-4-hydroxy-6-formyl pteridine	AG1	T241;S180	0.001 - 2.0
28	2-Amino-4-hydroxypteridine-6-carboxylic acid	M	T241;Ma387	3.6 - 7.3
29	2,4-Diaminopteridine	BA	T241;Ma387	1.5 - 6.3
30	Xanthopterin	D	T241;Ma387	0.056 - 5.6

ENTRY NO.	COMPOUND NAME	SOURCE	TUMOR	DOSE RANGE (mM/l)
	PYRIMIDINES:			
31	N/4(5-Amino-7-hydroxy-2v-triazolo(d)-pyrimidyl)benzoyl/7 glutamic acid	BL	S180	0.1 - 10.0
32	2-Amino-4-methyl-5-acetylpyrimidine	M	T241;Ma387	3.6 - 14.4
33	2-Aminopyrimidine	Dough.	S180	0.125 - 4.0
34	5-Aminouracil	BE	T241;Ma387	15.8 - 31.5
35	1-Arabopyranosyl-5-methylcytosine	AW4	S180	0.125 - 2.0
			T241	0.5 - 4.0
36	8-Azaadenine (or, 7-amino-1-v-triazolo(d)-pyrimidine)	AW1	S180	0.1 - 10.0
37	2-Benzylthiouracil	Dough.	S180	0.125 - 4.0
38	2-p-Carbethoxyphenyl-5-amino-7-hydroxy-v-triazolo(d)-pyrimidine	BL	S180	0.1 - 10.0
39	2-p-Carboxyphenyl-5-amino-7-hydroxy-y-triazolo(d)-pyrimidine	BL	S180	0.1 - 10.0
40	2-p-Carboxyphenyl-5,7-diamino-v-triazolo(d)-pyrimidine	BL	S180	0.1 - 10.0
41	5-Chloro-7-amino-1-v-triazolopyrimidine	AW4	S180	0.125 - 4.0
42	2-Chloro-4,6-diamino-5-nitropyrimidine	AW6	S180	0.125 - 4.0
43	5-Chlorouridine	AW4	S180	0.125 - 2.0
			T241	0.5 - 4.0
44	Cordycepin	AW5	S180	0.1 - 10.0
45	5,7-Diamino-1-v-triazolo(d)-pyrimidine	AW1	S180	0.1 - 10.0
46	N(5,7-Diamino-2v-triazolo(d)-pyrimidyl benzoyl) L(+) glutamic acid	BL	S180	0.1 - 10.0
47	5,7-Dihydroxy pyrimidotriazole	AW1	S180	0.1 - 10.0
48	2-Dimethylamino-4,6-diaminopyrimidine	AW6	S180	0.125 - 4.0
49	2,4-Dimethyl-5-bromo-6-(2',4'-dibromo-anilino)-pyrimidine	BE	S180	0.1 - 10.0
50	1-β-d-Glucopyranosyluracil	AW6	S180;T241	0.5 - 4.0
51	5-Hydroxy-7-amino-1-v-triazolo(d)-pyrimidine	AW1	S180	0.1 - 10.0
52	5-Hydroxyuridine	AW4	S180	0.125 - 2.0
			T241	0.5 - 4.0
53	5-Isoamyluracil	AW7	S180;T241	0.125 - 2.0
54	5-Mercapto-7-amino-1-v-triazolo(d)-pyrimidine	AW1	S180	0.1 - 10.0
55	6-Methylhydrouracil	Dough.	S180	0.125 - 4.0
56	6-Methylthiouracil	Dough.	S180	0.125 - 4.0
57	6-Methyluracil	Dough.	S180	0.125 - 4.0
58	3-Methyluridine	Visser	S180	0.125 - 4.0
			T241	0.5 - 4.0

ENTRY NO.	COMPOUND NAME	SOURCE	TUMOR	DOSE RANGE (mM/l)
59	5-Aminouracil	BE	T241;Ma387	15.8 - 31.5
60	Orotic acid	D1	S180	0.125 - 4.0
61	2-Phenyl-5-amino-7-hydroxy-v-triazolo (d)-pyrimidine	BL	S180	0.1 - 10.0
62	2-Phenyl-5,7-diamino-v-triazolo(d)-pyrimidine	BL	S180	0.1 - 10.0
63	Vicine	AW3	S180;T241	0.125 - 2.0
64	d-Xylopyranosyl-5-methylcytosine	AW4	S180	0.125 - 2.0
			T241	0.5 - 4.0
	STEROIDS:			
65	Acetoxypregnenolone	BT	S180	0.125 - 2.0
66	Desoxycorticosterone acetate	DG	S180	0.125 - 2.0
67	17α-Hydroxy-11-desoxycorticosterone-31-acetate	DE	S180	0.125 - 2.0
68	Pregnenolone	BT	S180	0.125 - 2.0
69	Progesterone	BO	S180	0.125 - 2.0
	MISCELLANEOUS:			
70	7-Acetoxy-2-Methyl-3-phenyl chromone	D	S180	0.25 - 4.0
71	α-Allocryptopine	EI	S180	0.125 - 2.0
72	Amphenone B, or 1,2-bis(p-aminophenyl)-2-methyl-propanone-1	EE	S180	0.25 - 4.0
73	Benzotriazole	AE	S180	0.1 - 10.0
74	1-Chloro-2,3-epoxypropane	M	S180	0.25 - 4.0
75	Corlumine	EI	S180	0.125 - 2.0
76	2-Desoxy- d-glucose	EP	S180	0.1 - 10.0
77	Diethylstilbestrol	D	S180	0.125 - 2.0
78	3,4-Epoxy-1-butene	AE	S180	0.25 - 4.0
79	Flavone	D	S180	0.25 - 4.0
80	Flavonol	D	S180	0.25 - 4.0
81	Formamide	E	S180	0.1 - 10.0
82	Δ-Guanidovaleric acid	AW5	S180	0.1 - 10.0
83	1-Hydroxy-2,3-epoxypropane	M	S180	0.25 - 4.0
84	2-Hydroxy flavone	D	S180	0.25 - 4.0
85	7-Hydroxy-2-methyl-3-phenyl chromone	D	S180	0.25 - 4.0
86	Lyxoflavin	D_1	S180	0.125 - 4.0
87	p-(N-Methylamino) benzoic acid	M	T241;Ma387	0.66 - 1.66

ENTRY NO.	COMPOUND NAME	SOURCE	TUMOR	DOSE RANGE (mM/l)
88	Nitron	AN	T241;Ma387	0.16 - 0.64
89	Protoanemonin	AW2	T241;Ma387	0.01 - 1.04
90	Synkayvite	AJ	T241	0.0001 - 0.1
91	1,2,3,4-Tetrahydro-4-(3,4-dimethoxy-phenyl)-3-hydroxymethyl-6,7-dimethoxy-α-naphthoic acid anilide	DP	S180	0.1 - 10.0
92	1,2,3,4-Tetrahydro-4-(3,4-dimethoxyphenyl)-3-hydroxymethyl-6,7-dimethoxy-α-naphthoic acid n-propyl amide	DP	S180	0.1 - 10.0
93	4,5-Tetramethylene tropolone	AT	S180	0.1 - 10.0
94	Tropolone	AT	S180	0.008 - 0.5

The abbreviations for sources represent the following:

D	Merck and Company
D1	Dr. Karl Folkers
E	Eastman Kodak Company
M	Calco Chemical Division, American Cyanamid Company
N	Lilly Research Laboratories, Eli Lilly Company
AA	B. F. Goodrich Chemical Company
AE	National Research Council
AG1	Dr. T. H. Jukes, Lederle Laboratories
AJ	Hoffmann-La Roche, Inc.
AN	National Aniline-Allied Chemical and Dye Corporation
AT	Dr. William Doering, Hickrill Chemical Research Foundation, Inc.
AW1	Dr. Liebe Cavalieri
AW2	Dr. Kenneth Savard
AW3	Dr. Aaron Bendich
AW4	Dr. G. B. Brown
AW5	Dr. Ralph Barclay
AW6	Dr. John Davoll
AW7	Dr. Earl Balis
BA	Dr. C. K. Cain, McNeil Laboratories
BE	The Wellcome Research Laboratories
BL	Remington Rand, Inc.
BO	Ayerst, McKenna and Harrison
BT	Schering Corporation
BY	Upjohn Laboratories
DE	Glidden Corporation
DG	Roche-Organon
DP	William R. Warner, Inc.
EE	Dr. Roy Hertz, National Cancer Institute
DI	Dr. Wilson M. Whaley, University of Tennessee
EP	Biochemical Research Foundation, Inc.
Dough.	Dougherty Chemicals
Visser	Dr. Donald Visser

TESTS OF COMPOUNDS AGAINST VARIOUS TUMORS IN MICE

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Spontaneous tumors in mice were measured 3 times weekly for a sufficiently long period for them to grow at least 10 mm. (expressed as the sum of two diameters) in order to establish the normal growth rate. The tumors were then measured during a treatment period of 14 days and the rates of growth during control and experimental periods compared.

In experiments with grafted tumors the rate of growth of the tumors in mm. per day was compared with the average rate of growth of tumors in a group of untreated mice.

For further details see the table of negative results and the reference, "Experiments on the Chemotherapy of Cancer. VI. The Effect of Aromatic Bases." Biochemical Journal, 40, 55, 1946.

Sodium azide and d,l Methionine represent two compounds active against spontaneous mammary carcinomas in stock mice. Both compounds dissolved in water were injected 12 times I.P. at doses of 5 mg/K/day into groups of 5 mice. The ratios of average weight change of treated and control mice were 0.59 and 0.41 respectively for the two compounds.

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT	NO. OF ANIMALS	HOST SPECIES, STRAIN	DOSE mg/kg/day OR PER CENT IN FOOD	AV. WT. CHANGE: treated/ controls	NO. OF TREATMENTS OR DURATION OF FEEDING	ROUTE OF ADMINISTRATION	VEHICLE
95	DL . Alanine			sp. mam. ca.		7	Stock mice	400	0.76	12	I.P.	Water
96	Allyl iso thiocyanate		b. 150°	tr. sarc.	7	10	DBA mice	40	1.00	12	Oral	Arachis oil
97	2(p-Aminobenzene-sulphonamido)4-methyl-triazole	May & Baker		"	7	10	"	1000	1.00	12	"	Water
98	2-Amino-4:6-dimethylpyridine			sp. mam. ca.		6	Stock mice	0.2%	0.90	14	"	"
99	p-2-Aminophenyl-sulphonamido-5-amino-pyridine	May & Baker		tr. sarc.	7	10	DBA mice	1000	0.98	12	"	"
100	p-Aminophenylsulphonyl-ethylcyanide	I.C.I.		Crocker 180	7	10	Str. A mice	800	1.00	12	"	"
				sp. mam. ca.		4	Stock mice	800	1.36	12	"	"
101	p-Aminophenylsulphonyl-ethylcyanide	I.C.I.		"	7	10	"	400	1.05	12	"	"
102	Aminopterin	Lederle		lymphosarc.	7	10	C3H mice	0.5	0.95	12	I.P.	"
				sp. mam. ca.		4	Stock mice	0.5	0.80	12	"	"
103	β-Bromoethylamine hydro-bromide			"		4	"	100	1.15	4	"	"
104	Chloroethyl trimethyl-ammonium chloride			"		4	"	20	0.80	2	"	"
105	Cholesterol			tr. sarc.	7	10	DBA mice	1000	1.00	12	Oral	Arachis oil
106	Cyclohexylamine			"	7	10	"	200	0.95	12	"	Water
107	4:4'-Diamidinostilbene	May & Baker		"	7	10	"		0.99	12	"	"
108	Diethanolamine			sp. mam. ca.		4	Stock mice	0.5%	0.77	14	In food	"
109	Diethylchloroethylamine hydrochloride			"		4	"	10	0.82	2	I.P.	"
110	3:3'-Dihydroxybenzidine			lymphosarc.	7	10	C3H mice	400	1.15	12	"	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT	NO. OF ANIMALS	HOST SPECIES, STRAIN	DOSE mg/kg/day OR PER CENT IN FOOD	AV. WT. CHANGE: treated/ controls	NO. OF TREATMENTS OR DURATION OF FEEDING	ROUTE OF ADMINISTRATION	VEHICLE
111	Dimethylaminodiphenylether			sp. mam. ca.		4	Stock mice	0.2%	1.10	14	In food	Water
112	dl. -Dimethylamino-4:4-diphenyl-heptane-5-one hydrochloride	Burroughs Wellcome		"		5	"	10	1.01	12	I.P.	"
113	Dimethylbromoethylamine hydrobromide			"		4	"	50	1.10	2	"	"
114	Dimethylchloroethylamine hydrochloride			"		4	"	100	0.86	2	"	"
115	2:4-Dinitrophenol			"		12	"	10	0.87	6	"	Arachis oil
116	4:4'-Dipiperidyl			tr. sarc.	7	10	DBA mice	200	0.96	12	Oral	Water
117	Dibenzpyrene sulphate			sp. mam. ca.		4	Stock mice	200	1.15	12	"	"
				tr. sarc.	7	10	DBA mice	200	0.87	12	"	"
118	4:4'-Ditolylether			"	7	20	"	200	0.98	12	"	Arachis oil
119	Divinyl sulphone	Ministry of Supply		sp. mam. ca.		5	Stock mice	50	0.87	12	I.P.	Water
120	Furoin			tr. sarc.	7	10	DBA mice	400	1.00	12	Oral	"
121	Furyldioxime			"	7	10	"	250	0.92	12	"	"
122	Hypoxanthine			"	7	10	"	200	0.98	12	"	"
123	Isophorone			sp. mam. ca.		4	Stock mice	250	1.30	12	I.P.	Arachis oil
124	2:2l-Methylene-bis-(3:4:6 trichlorophenol)			"		5	"	6	1.10	12	"	"
125	Menaphthone (menadione)	Roche		trans. lympho sarc.	7	10	C3H mice	5	1.20	2	"	"
126	Methyl mercaptobenzthiazole			tr. sarc.	7	10	DBA mice	200	1.00	12	Oral	Water
127	α-Naphthoquinoline			"	7	10	"	200	0.98	12	"	"
128	4-Nitroso-1-naphthol			Crocker sarc.	7	10	Stock mice	100	0.92	12	"	"
				tr. sarc.	7	10	"	100	1.00	12	"	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT	NO. OF ANIMALS	HOST SPECIES, STRAIN	DOSE mg/kg/day OR PER CENT IN FOOD	AV. WT. CHANGE: treated/ controls	NO. OF TREATMENTS OR DURATION OF FEEDING	ROUTE OF ADMINISTRATION	VEHICLE
129	p-Phenylenediamine			tr. sarc.	7	10	DBA mice	40	0.99	12	Oral	Water
130	Sodium-p-aminobenzoate			sp. mam. ca.		4	Stock mice	1.0%	1.05	14	In food	"
131	Sodium 4-aminobenzene-sulphonyl-1-naphthyl-amine 5-sulphonate	May & Baker		Crocker sarc.	7	10	"	1000	0.97	12	Oral	"
132	Sodium 1-amino-8-naphthol-4:6-disulphonate			tr. sarc.	7	10	DBA mice	1000	1.00	12	"	"
133	Sodium chloromalonate			sp. mam. ca.		4	Stock mice	200	0.92	12	"	"
134	Sodium periodate			tr. sarc.	7	20	DBA mice	200	0.94	12	"	"
						4	"	800	1.31	12	"	"
135	Sodium tiglate	Glaxo		sp. mam. ca.		4	"	800	1.31	12	"	"
136	Sulphadimidine	I.C.I.		"		4	Stock mice	0.2%	0.70	14	In food	"
137	Suramin	I.C.I.		"		4	"	30	0.95	14	I.P.	"
138	Tetrabromobenzidine sulphone			Crocker 180	7	10	Str. mice	200	0.92	12	Oral	"
139	Tetramethyldiamino-benzophenone			tr. sarc.	7	30	DBA mice	400	0.95	12	"	"
140	Tetramethyldiaminodecane			sp. mam. ca.		4	Stock mice	10	0.75	12	I.P.	"
141	Tetramethyldiaminothio-benzophenone			tr. sarc.	7	20	DBA mice	400	0.92	12	Oral	"
142	p-Toluenesulphonamide		m. 135°	sp. mam. ca.		4	Stock mice	0.2%	0.81	14	In food	"
143	Triethanolamine		b. 275-278°	"		4	"	0.2%	0.86	14	"	"
144	Trypan Blue			Crocker 180			"	200	0.98	12	Oral	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT	HOST SPECIES, STRAIN	NO. DEATHS/ NO. TEST ANIMALS Controls	Treated	DOSE mg/kg/day OR PER CENT IN FOOD	NO. OF TREATMENTS OR DURATION OF FEEDING	ROUTE OF ADMINISTRATION	VEHICLE
145	Aconitic acid, tripropyl ester	So. Reg. Research Lab.		S180		Web.	2/6	2/5	1%	4 weeks	Diet	
				C43		C57	5/5	4/5	1%	4-6 weeks	"	
				SDO		C3H	5/9	7/9	1%	"	"	
				EA		Web.	11/11	11/11	1%	3-4 weeks	"	
146	Aconitic acid, tributyl ester	S.R.R.L.		S180		Web.	2/6	1/5	1%	4-6 weeks	"	
				C43		C57	5/5	4/5	1%	"	"	
				SDO		C3H	5/9	4/9	1%	"	"	
				EA		Web.	11/11	11/11	1%	3-4 weeks	"	
147	Naphthylene acetonitrile	DPI		S180		Web.	0/7	4/7	0.2%	4-6 weeks	"	
148	2-Ethyl-2-hexenoic acid	Carbide & Carbon		S180		Web.	0/7	0/7	1%	"	"	
149	p-Hydroxy-cinnamic acid			sp. mam. ca.	1-2 mo. old	C3H		3/3	1%		"	
150	m-Amino cyclohexanol . HCl		200°	C43		C57	13/15	7/15	1%	4-6 weeks	"	
151	1,3-cyclohexanediol		oil	S180		Web.	2/6	2/5	1%	"	"	
				C43		C57	4/5	4/5	1%	"	"	
				SDO		C3H	4/6	1/6	1%	"	"	
152	Coumarilic acid	DPI		S180		C57	1/6	5/6	1%	"	"	
153	Furfuraldoxime	DPI		EA		Web.	11/11	11/11	0.5%	3-4 weeks	"	
154	Furoic acid	DPI		S180		C57	2/6	1/6	1%	4-6 weeks	"	
155	Furfuramide	DPI		EA		Web.	11/11	11/11	0.1%	3-4 weeks	"	
156	Furfuryl acetate	DPI		C43		C57	6/6	6/6	0.5%	4-6 weeks	"	
				SDO		C3H	7/7	8/8	0.5%	"	"	
				EA		Web.	33/33	33/33	0.5%	3-4 weeks	"	

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT	HOST SPECIES, STRAIN	NO. DEATHS/ NO. TEST ANIMALS Controls	Treated	DOSE mg/kg/day OR PER CENT IN FOOD	NO. OF TREATMENTS OR DURATION OF FEEDING	ROUTE OF ADMINISTRATION	VEHICLE
157	Furylacrylamide	DPI		EA		Web.	11/11	11/11	0.1%	3-4 weeks	Diet	
158	Furylacrylic acid	DPI		EA		Web.	11/11	11/11	0.5%	"	"	
159	Furfuralacetophenone	DPI		EA		Web.	11/11	11/11	0.5%	"	"	
160	Furil	DPI		EA		Web.	11/11	11/11	0.1%	"	"	
161	p-Amino-azo benzene	DPI		S180		C3H	2/13	2/6	0.1%	4-6 weeks	"	
				C43		C57	3/5	4/5	0.1%	"	"	
162	Mannuronic acid lactone	Kelco Co.		S180		C57	3/10	0/3	1%	"	"	
				C43		C57	4/5	5/5	2%	"	"	
163	3-β-hydroxy ethyl orotic acid			S180		Web.	3/6	2/5	1%	"	"	
				C43		C57	4/5	3/5	1%	"	"	
				SDO		C3H	4/6	2/6	1%	"	"	
164	2-Amino pyrimidine			S180		C3H	2/13	2/6	0.5%	"	"	
				C43		C57	9/11	8/11	0.5%	"	"	
				SDO		C3H	7/7	8/8	0.5%	"	"	
165	2,5-Dimethyl benzimidazole			S180		C57	3/10	0/3	250 mg/kg	"	"	Propylene glycol
				C43		C57	10/10	3/3	250 mg/kg	"	"	"

DPI = Distillation Products Industries
SDO = sarcoma from Dr. K. DeOhm
EA = Ehrlich Ascites tumor

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TESTS OF COMPOUNDS AGAINST SARCOMA 180 AND LEUKEMIA IN MICE

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The technique employed for the study of Sarcoma 180 is the same as that outlined in the Sloan-Kettering Institute report (see Stock et al this supplement). Positive controls have included A-methopterin at 1.5 mg/K/day and TEM at 0.75 mg/K/day.

Studies have been made against AK4 leukemia in AKR mice. The compounds are injected intraperitoneally starting twenty-four hours after injection of a leukemic cell suspension. The untreated controls and animals treated without benefit survive six to ten days. A-methopterin (1.5 mg/K/day) and TEM (0.75 mg/K/day) have prolonged survival times for one to two weeks.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
166	1-Acenaphthenol		S180	Mouse	5	300	Gum acacia
			Leukemia	AKR	6	300	" "
167	Acenaphthylene		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
168	3-Acetylamino fluoranthene	m.250-251	S180	Mouse	5	500	" "
			Leukemia	AKR	6	500	" "
169	N-Acetyl-methylaniline	m.99-100	S180	Mouse	5	32	" "
			Leukemia	AKR	6	32	" "
170	1,2-Benzo phenazine		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
171	β-Benzoyl propionic acid		S180	Mouse	5	200	" "
			Leukemia	AKR	6	160	" "
172	Biphenylene-α-naphthyl-carbinol	m.151-152	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
173	Biphenylene-phenylcarbinol	m.109-109.5	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
174	1-(α-Bromo propionyl)-naphthalene	m.88-89	S180	Mouse	5	200	" "
			Leukemia	AKR	6	200	" "
175	3-Carbomethoxy-4-methyl-4-nitro-pentanoic acid		S180	Mouse	5	500	" "
			Leukemia	AKR	6	500	" "
176	2,5-Diacetoxybenzoic acid	m.120-122	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "

Above compounds obtained through the courtesy of Dr. Milton Kloetzel, USC, Dept. of Chemistry.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
177	α,β-Dibromosuccinic acid		S180	Mouse	5	300	Saline and sod. bicarb.
			Leukemia	AKR	6	240	
178	2',5'-Dichlorocinchophenic acid		S180	Mouse	5	300	Gum acacia
			Leukemia	AKR	6	300	" "
179	2,5-Dihydroxyacetophenone	m.201-204	S180	Mouse	5	100	" "
			Leukemia	AKR	6	100	" "
180	9,10-Diphenyl anthracene	m.244-246	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
181	2,3-Diphenyl cinchoninic acid		S180	Mouse	5	100	" "
			Leukemia	AKR	6	60	" "
182	Diphenyl-9-phenanthryl carbinol	m.173-175	S180	Mouse	5	500	" "
			Leukemia	AKR	6	500	" "
183	Ethyl 4'-aminocinchophenate		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
184	Ethyl 4'-bromocinchophenate	m.94.5-95	S180	Mouse	5	200	" "
			Leukemia	AKR	6	200	" "
185	Ethyl 6,8-dichloro-2-p-chlorophenyl cinchoninate		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
186	Ethyl 2',4'-dichlorocinchophenate	m.156-157	S180	Mouse	5	300	" "
			Leukemia	AKR	6	240	" "
187	Ethyl 2-(3,4-dichlorophenyl)-cinchoninate		S180	Mouse	5	500	" "
			Leukemia	AKR	6	500	" "

Above compounds obtained through the courtesy of Dr. Milton Kloetzel, USC, Dept. of Chemistry.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
188	Ethyl 2-(p-tolyl)-cinchoninate	m.52-53	S180	Mouse	5	100	Gum acacia
			Leukemia	AKR	6	100	" "
189	9-Fluorenepropionic acid		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
190	Fluorenone	m.84-85	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
191	2-Methoxy-2-nitrodiphenylamine	m.82	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
192	Methyl-bis(2,4-dichlorophenyl)-amine		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
193	4-Methyl-4 nitro-1,3-diphenyl-1-pentanone		S180	Mouse	5	300	" "
			Leukemia	AKR	6	240	" "
194	1-Nitro-2-acetylamino-naphthalene	m.124	S180	Mouse	5	400	" "
			Leukemia	AKR	6	400	" "
195	2-Nitro-diphenylamine		S180	Mouse	5	400	" "
			Leukemia	AKR	6	400	" "
196	4-Nitro-1,3-diphenyl-1-butanone	m.95-98	S180	Mouse	5	500	" "
			Leukemia	AKR	6	500	" "
197	4-Nitro-1,3-diphenyl-1-hexanone	m.155-156	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
198	4-Nitro-1,3-diphenyl-1-pentanone	m.68-71	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "

Above compounds obtained through the courtesy of Dr. Milton Kloetzel, USC, Dept. of Chemistry.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
199	4-Nitro-1,3-diphenyl-1-pentanone	m.100.5-102	S180	Mouse	5	300	Gum acacia
			Leukemia	AKR	6	300	" "
200	5-Nitro-5-methyl-4-phenyl-2-hexanone	m.62-64	S180	Mouse	5	500	" "
			Leukemia	AKR	6	300	" "
201	5-Nitro-4-phenyl-2-pentanone	m.96-100	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
202	2-Nitrothiophene	m.53-55	S180	Mouse	5	200	" "
			Leukemia	AKR	6	200	" "
203	1,2,3,4,5,6,7,8-Octahydryl anthracene	m.69-72	S180	Mouse	5	400	" "
			Leukemia	AKR	6	320	" "
204	3-Phenanthryl-diphenylcarbinol	m.92-93	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
205	9-Phenanthryl-diphenylmethane	m.173-174	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
206	9-(9-Phenanthryl)-9-methoxyfluorene	m.231-232	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
207	n-Propylidene-succinic acid	m.162-164	S180	Mouse	5	500	" "
			Leukemia	AKR	6	400	" "
208	Tetraethyl ethylenetetra carboxylate	m.53-55	S180	Mouse	5	300	" "
			Leukemia	AKR	6	240	" "
209	Triphenylethylene	m.68	S180	Mouse	5	300	" "
			Leukemia	AKR	6	240	" "

Above compounds obtained through the courtesy of Dr. Milton Kloetzel, USC, Dept. of Chemistry.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
210	Acenaphthoquinone	m. 258	S180	Mouse	5	200	Gum acacia
			Leukemia	AKR	6	160	" "
211	1-Aceto-4-benzyloxy naphthalene		S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
212	2-Acetonaphthalide	m. 131-132	S180	Mouse	5	200	" "
			Leukemia	AKR	6	200	" "
213	Chloroacetamide		S180	Mouse	5	32	" "
			Leukemia	AKR	6	32	" "
214	2-Chloro-1-acetonaphthalene	m. 63-65	S180	Mouse	5	200	" "
			Leukemia	AKR	6	200	" "
215	Di-chloro ortho benzoyl benzoic acid		S180	Mouse	5	150	" "
			Leukemia	AKR	6	150	" "
216	Trans-1,2-diphenyl-acenaphthenediol-1,2	m. 158-159	S180	Mouse	5	200	" "
			Leukemia	AKR	6	160	" "
217	1,8-Di-o-toluoyl-naphthalene	m. 242-243	S180	Mouse	5	300	" "
			Leukemia	AKR	6	300	" "
218	1,2-Di-O-tolylacenaphthenediol-1,2 (trans)	m. 163-165	S180	Mouse	5	300	" "
			Leukemia	AKR	6	240	" "
219	Hydroquinone		S180	Mouse	5	64	" "
			Leukemia	AKR	6	64	" "
220	p-Hydroxy-acetophenone	m. 108-110	S180	Mouse	5	200	" "
			Leukemia	AKR	6	160	" "

Above compounds obtained through the courtesy of Dr. Ronald Brown, USC, Dept. of Chemistry.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
221	2-Methyl cinchoninic acid		S180	Mouse	5	300	Saline & sod. bic.
			Leukemia	AKR	6	300	"
222	Naphthalic anhydride		S180	Mouse	5	160	Gum acacia
			Leukemia	AKR	6	96	" "
223	2-Trichloromethyl-cinchoninic acid		S180	Mouse	5	150	" "
			Leukemia	AKR	6	150	" "
	Above compounds obtained through the courtesy of Dr. Ronald Brown, USC, Dept. of Chemistry.						
224	2-Amino-4-diethylamino-s-triazine	m. 162	S180	Mouse	5	150	" "
			Leukemia	AKR	6	150	" "
225	7-Amino-1-v-triazolo-(d)-pyrimidine	m. > 310	S180	Mouse	5	25	" "
			Leukemia	AKR	6	25	" "
226	Ammonium salt of benzoylurea-ortho-sulfonic acid	m. 272-273	S180	Mouse	5	500	Saline
			Leukemia	AKR	6	500	"
227	l-Biotin	m. 230-231	S180	Mouse	5	500	Gum acacia
228	1-Carbethoxymethyl-4-carbomethoxypyridinium bromide	m. 154-155	S180	Mouse	5	90	Saline
			Leukemia	AKR	6	90	"
229	dl-cis-3,4-Diamino-2-(w-hydroxypropyl) thiophane dihydrochloride	m. 249-252	S180	Mouse	5	500	"
			Leukemia	AKR	6	500	"
230	2,6-Diamino-s-triazine	m. 330	S180	Mouse	5	20	Gum acacia
231	d-3,4-(1', 3'-Dibenzyl-2'-ketoimidazolido)-1,2-trimethylene-thiophanium-d-camphorsulfonate	m. 232-233	S180	Mouse	5	20	Saline
			Leukemia	AKR	6	20	"
	Above compounds obtained through the courtesy of Hoffmann-La Roche, Inc., Nutley, N. J.						

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
232	3-(1,4-Dihydro-3-hydroxy-4-oxonaphthylideneamino)-N-[β-(β-hydroxy-ethylamino)ethyl] benzamide	d. 300	S180	Mouse	5	500	Saline
			Leukemia	AKR	6	500	"
233	3-Diphenylacetoxy-quinuclidine sulfate	m. 102-105	S180	Mouse	5	55	"
			Leukemia	AKR	6	55	"
234	dl-Homobiotin	m. 220-221	S180	Mouse	5	500	"
			Leukemia	AKR	6	500	"
235	1-Methyl-3-(2,6,6-trimethyl-1-cyclohexene-1-yl)-propylamine HCl	m. 222-223	S180	Mouse	5	20	"
			Leukemia	AKR	6	20	"
236	1-Phenazinecarboxylic acid	m. 240-241	S180	Mouse	5	500	Gum acacia
			Leukemia	AKR	6	500	" "
237	2-Phenyl-3(or 4)-chloro-5-[m-(4,5-dihydro-2-imidazolyl) phenyl] furan hydrochloride	m. 274-276	S180	Mouse	5	20	" "
			Leukemia	AKR	6	20	" "
238	2-Phenyl-3-(or 4)-chloro-5-(m-guanylphenyl) furan hydrochloride	m. 237-240	S180	Mouse	5	25	" "
			Leukemia	AKR	6	25	" "
239	2-Phenyl-5-[p-(4,5-dihydro-2-imidazolyl) phenyl] furan hydrochloride	m. 301-303	S180	Mouse	5	35	" "
			Leukemia	AKR	6	28	" "
240	2-Phenyl-5-[m(4,5-dihydro-2-imidazolyl) phenyl] furan hydrochloride methanolate	m. 266-268	S180	Mouse	5	35	" "
			Leukemia	AKR	6	28	" "
241	Polyporic acid	m. 305	S180	Mouse	5	25	" "
			Leukemia	AKR	6	25	" "
242	Potassium salt of 5-[3-(3-hydroxy-4-oxo-1,4-dihydro-7-sulfo-1-naphthylideneamino)-4-methoxyphenylsulfonamido]-3,4-dimethyl-isoxazole	d. 300	S180	Mouse	5	170	Saline-sod. acetate-sod carbonate
			Leukemia	AKR	6	170	

Above compounds obtained through the courtesy of Hoffmann-La Roche, Inc., Nutley, N. J.

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	NO. OF ANIMALS	DOSE mg/kg/day	VEHICLE
243	β-Propiolactone	b.155	S180	Mouse	5	100	Saline
			Leukemia	AKR	6	100	"
	Above compound obtained through the courtesy of B. F. Goodrich Chemical Co.						
244	4-Aminophenyl-2'-amino-5'-thiazylsulfone	m.218-219	S180	Mouse	5	500	Gum acacia
			Leukemia	AKR	6	300	" "
245	4,4'-Diamino-2-acetyl-sulfamyl diphenylsulfone sodium salt		S180	Mouse	5	400	" "
			Leukemia	AKR	6	400	" "
246	4,4'-Diaminodiphenyl-sulfone	m.171-173	S180	Mouse	5	300	" "
			Leukemia	AKR	6	240	" "
247	4,4'-Diaminodiphenylsulfone didextrose sodium sulfonate	m.120-125	S180	Mouse	5	500	Saline
			Leukemia	AKR	6	500	"
248	4,4'-Diaminophenyl-sulfone digalactose	s.134	S180	Mouse	5	500	"
			Leukemia	AKR	6	500	"
249	4,4'-Diaminodiphenyl-sulfone-2-sulfonamide	d.229-237	S180	Mouse	5	400	Gum acacia
			Leukemia	AKR	6	400	" "
	Above compounds obtained through the courtesy of Parke, Davis & Co.						

In each experiment seven intraperitoneal injections constituted the treatment course.

CHEMOTHERAPY STUDIES OF VARIOUS MOUSE TUMORS AND SEVERAL MYELOID LEUKEMIAS

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Our procedure for solid tumors was to grind them in a mortar and dilute with normal saline and then inject the suspension subcutaneously. Our drugs are dissolved or suspended in aqueous solution, 3 per cent gum acacia solution or in peanut oil. In some cases the wetting agent, sorbitan monooleate, was added to aid solution. Tumors were graded in the usual manner $\pm$ (slight inhibition), the average diameter of the treated tumors was one half to three quarters of the diameter of the control tumors; + (moderate inhibition), the diameter was one fourth to one half that of the control tumors; otherwise the results were reported negative.

The procedure for leukemia tumors was to grind them with normal saline and inject the suspension subcutaneously. The results were judged by the day of death relative to that of the controls.

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
250	p-Acetaminodiphenyl			S37	Web.	2	Oil	I.P.	4	9/10	+0.2 / +2.5
				C3HS	C3H	2	"	Oral (tube)	7	10/10	+0.6 / +0.9
251	N-(p-Acetaminophenyl) furamide			S180	Web.	2	Aqueous	I.P.	3	10/10	+1.7 / +2.7
252	N-(p-Acetaminophenyl) furan-acrylic acid amide			S180	Web.	2	"	"	4	9/10	+0.4 / +2.7
253	p-Acetaminophenyl sulfonhydrazide		m. 183-184	S37	Web.	4	"	"	8	10/10	-0.6 / +0.4
254	Acetone-o-amino benzhydrazone			S37	Web.	2.5	"	"	9	9/10	+3.1 / +1.2
255	N-Acetyl-p-hydrazino diphenyl		m. 208-210	BA	C3H	2	Oil	"	5	7/7	+5.6 / +3.3
			m. 172-173	BA	C3H	2	"	"	5	7/7	+4.3 / +3.3
256	N-Acetyl-β-naphthylamine			C3HS	C3H	3	Aqueous	Oral (tube)	10	10/10	+0.4 / +0.8
257	p-Amino acetanilide			S180	Web.	3	"	I.P.	6	10/10	+0.5 / +1.7
258	o-Aminodiphenyl	Matheson		S37	Web.	2	Oil	I.P.	5	10/10	+2.1 / +3.9
				S	C3H	2	"	Oral (tube)	6	10/10	+2.3 / +1.7
259	p-Aminodiphenyl	Matheson		C3HS	C3H	1.5	"	"	7	9/9	+0.5 / +0.8
260	3-Aminodiphenyl methane		m. 46	S37	Web.	3	"	I.P.	7	9/10	+1.9 / +1.8
261	p-Amino-o-methyl diphenyl hydrochloride		m. 264-265	S37	Web.	1	Aqueous	"	4	7/7	-1.1 / 0

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
262	p-Amino-o'-methyl diphenyl		m. 146-147	S37	Web.	1	Aqueous	I.P.	4	6/7	+1.1 / 0
263	8-Amino-7-methyl-2-phenazinol			C3HS	C3H	3	"	Oral (tube)	9	8/8	-0.8 / +0.3
264	N-(p-Aminophenyl) furamide		m. 123	S180	Web.	4	"	I.P.	3	8/10	+2.5 / +2.7
265	3-Aminoquinoline	DPI		S180	Web.	0.7	"	"	8	10/10	-1.7 / +0.4
266	2-Amino-5-thiol benzimidazole			S180	Web.	10	Diet	Oral	9	10/10	-0.5 / +3.0
267	N-(p-Anisyl) furamide			S180	Web.	16	"	"	9	10/10	-0.4 / +1.5
268	N-(p-Anisyl) furanacrylic acid amide			S180	Web.	3	Aqueous	I.P.	8	9/10	+0.7 / +2.2
269	N-(Benzene sulfonyl) furamide			S180	Web.	20	Diet	Oral	8	9/9	-0.2 / +2.0
270	N-(Benzene sulfonyl) furanacrylic acid amide			S180	Web.	25	"	"	9	9/10	-0.7 / +2.0
271	Benzidine-N, N-diacetic acid			S37	Web.	3	Oil	I.P.	10	10/10	-0.1 / +2.0
272	β-Benzoyl alanine		m. 192	S37	Web.	8	Aqueous	"	7	10/10	-0.4 / +0.5
273	N-Benzyl furamide			S180	Web.	12	Diet	Oral	8	10/10	+1.7 / +2.0
274	Benzylidene azine		m.94-96	S37	Web.	4	Aqueous	I.P.	7	10/10	+0.6 / +2.3
275	N-Benzyl quinolinimide			S180	Web.	20	Diet	Oral	9	9/10	-0.4 / +1.6
276	4-Chloro-3,5-dimethylphenoxyethanol			S37	Web.	3	Oil	I.P.	7	10/10	+0.9 / +2.5

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINISTRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
277	4-Chloro-1-hydroxy-2-naphthoic acid			S37	Web.	2	Aqueous	I.P.	6	7/7	-2.8 / -0.2
278	N-(p-Chlorophenyl) furamide			S180	Web.	20	Diet	Oral	8	10/10	-2.9 / +2.2
279	α-Cyano furanacrylic acid			S180	Web.	15	"	"	9	9/10	-2.6 / +3.4
280	3,3'-Diaminodiphenylsulfone			S37	Web.	4	Aqueous	I.P. Oral (tube)	8	10/10	-0.7 / +0.5
281	o-Dimethylamino diphenyl			S37	Web.	1	Oil	I.P.	4	10/10	+1.0 / +2.0
282	N-(β-Diethylaminoethyl) 2-furamide		Oil	S180	Web.	16	Diet	Oral	9	10/10	-1.0 / +1.5
283	N,N-Diethyl-2-furamide		Oil	S180	Web.	10	"	"	8	10/11	-1.8 / -0.6
284	Diethylmalono-urethane			S37	Swiss	48	Aqueous	I.P.	6	10/10	+1.0 / +3.2
285	p,p'-Dihydrazino diphenyl		m. 176-179	BA	C3H	0.5	"	"	5	7/7	+2.1 / +2.3
286	p,p'-Dihydrazino diphenylether dihydrochloride		m. 227	BA	C3H	1	"	"	6	7/7	+1.6 / +2.3
287	α,β-Dihydrazino hydrocinnamic acid		m. 160-161	S37	Web.	2	"	"	4	9/10	-0.2 / +3.1
288	N-(1,3-Dihydroxytertbutyl)-p-nitrobenzamide			S37	Swiss	8	"	"	10	9/9	-1.2 / +1.0
289	p,p'-Dihydroxydiphenyl	DPI		S37	Web.	2	Oil	"	9	10/10	-1.6 / +0.4
290	4,4'-Dihydroxy-3,3'-dimethyldiphenyl			S37	Web.	2	"	"	8	10/10	+0.5 / +0.4

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
291	3-N-bis(2, 3-Di-hydroxypropyl) amino-quinoline hydrochloride		m. 242-243	S37	Web.	12	Aqueous	Oral (tube)	6	10/10	+0.7 / +2.3
				C3HS	C3H	8	"	"	14	7/7	+1.1 / +1.5
292	o, o'-Dimethoxybenzidine			C3HS	C3H	4	"	I. P.	9	10/10	+1.6 / +0.8
293	o-Dimethylaminodiphenyl			S37	Web.	3	Oil	"	5	10/10	+3.8 / +3.9
294	N-(p-Dimethylaminophenyl) furamide			S180	Web.	10	Diet	Oral	8	10/10	-0.6 / -0.6
295	N, N-Dimethyl-2-furamide		Oil	S180	Web.	10	"	"	8	10/10	-3.2 / -0.6
296	Di-β-Naphthyl-p-phenylenediamine			S37	Web.	2	Oil	I. P.	4	9/10	+3.8 / +2.0
297	Di(p-nitrobenzoyl) hydrazine		m. > 250	S37	Web.	5	Aqueous	"	8	10/10	-0.1 / +0.4
298	2, 4'-Dinitrodiphenyl	DPI		S37	Web.	1	Oil	"	8	10/10	+0.3 / +0.5
299	Diphenoxy phosphoramic acid			S37	Web.	2	Aqueous	"	7	10/10	+0.9 / +3.5
300	Diphenylbenzidine (N, N'-derivative)			S37	Web.	2	Oil	"	5	8/8	+1.5 / +1.4
301	S-Diphenylcarbazide			S	C3H	4	Aqueous	Oral (tube)	8x	7/7	+0.5 / +1.5
				S37	Web.	2	Oil	"	7x	10/10	-0.1 / +3.0
302	Diphenylformamidine			S	C3H	4	Aqueous	"	8	7/7	+0.8 / +1.5
				S37	Web.	3	"	"	8	10/10	+0.5 / +1.4

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINISTRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
303	N-(o-Diphenyl) furamide			S37	Web.	1	Oil	I.P.	5	10/10	+1.4 / +2.1
304	N-(p-Diphenyl) furamide			S37	Web.	1.7	"	"	6	9/10	+1.5 / +1.1
				C3HS	C3H	0.5	"	"	9	10/10	+0.9 / +0.6
305	N-(p-Diphenyl) furanacrylamide			S37	Web.	0.7	"	"	4	10/10	+1.4 / +2.0
306	N-(p-Diphenyl) glycine			S37	Web.	2	Aqueous	"	8	9/10	-1.0 / +0.5
307	4,5-Diphenylimidazol-2-one			C3HS	C3H	3	Oil	Oral (tube)	10	8/8	+0.2 / +1.3
308	Dipyruvic acid, hydrazone of biphenyl dihydrazine			S37	Web.	8	Aqueous	"	9	8/10	+1.5 / +2.3
				C3HS	C3H	8	"	"	10	10/10	+1.0 / +0.8
309	N-(p-Ethoxyphenyl) furamide		m.127	S180	Web.	24	Diet	Oral	8	10/10	-0.5 / -0.3
310	N-(p-Ethoxyphenyl) furanacrylic acid amide			S180	Web.	15	"	"	9	10/10	-0.1 / -0.9
311	N-(p-Ethoxyphenyl) glyoxalamide oxime			S37	Web.	12	Aqueous	I.P.	6	10/10	+0.1 / +0.5
312	N-(p-Ethoxyphenyl) nicotinamide			S180	Web.	15	Diet	Oral	9	9/10	+0.1 / -0.9
313	1-[2'-(6'-Ethoxy) quinolyl]-2-p-dimethylamino-phenyl ethylene		m.184	S180	Web.	9	"	"	9	10/10	-0.7 / +4.1
314	1-[2'-(6'-Ethoxy) quinolyl]-2-hydroxy-2-p-dimethylaminophenylethane			S180	Web.	10	"	"	9	10/10	+1.7 / +4.1
315	1-[2'-(6'-Ethoxy) quinolyl]-2-imino-2-p-dimethylaminophenylethane			S180	Web.	10	"	"	9	9/10	+0.5 / +0.6

PLEASE CORRECT THIS ERROR IN YOUR COPY

The data on pages 30 through 40 were obtained by B. L. Freedlander and Arthur Furst. Please paste over the material now on page 29 and insert new page 40a before page 41. Please paste the names Freedlander and Furst (herewith) over the names Gelhorn *et al.* on pages 30 through 40, and the page number 40a over 29 in the Table of Contents.

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
316	α-Ethylfuran acrylic acid	B	m.92-97	S180	Web.	30	Diet	Oral	8	10/10	0/+1.8
317	Ethyl p-hydroxycinnamate			S180	Web.	15	"	"	9	10/10	+1.8/+1.4
318	p-Fluorodiphenyl			S37	Web.	1	Oil	I.P.	4	7/7	+1.6/0
319	Furanacrylic acid		m.138	S180	Web.	25	Aqueous Diet	Oral	9	10/10	+0.6/+1.6
320	2-Furildioxime	DPI		S180	Web.	5	Diet	"	9	9/10	-0.7/+0.7
321	2-Furylidene malonic acid			S180	Web.	20	"	"	9	12/12	+0.5/+3.4
322	β-(2-Furyl) oximinopyruvic acid			S180	Web.	10	"	"	8	10/10	+0.2/+1.8
323	β-(2-Furyl) thiopyruvic acid			S180	Web.	8	Aqueous	I.P.	7	9/10	-1.0/+0.8
324	N-(Guanidino) iminopyruvic acid		m.> 240	S37	Web.	2.5	"	"	9	9/10	+0.5/+1.2
325	α-Hydrazino acetic acid		m.182-184	S37	Web.	0.25	"	"	4	9/10	+1.4/+2.3
326	2-Hydrazinobenzothiazole			C3HS	C3H	0.7	Oil	"	5	10/10	+2.2/+1.6
				S37	Web.	0.7	"	"	7	10/10	+0.8/+1.1
327	p-Hydrazino-p'-carboxydiphenyl			S37	Web.	5	Aqueous	Oral (tube)	6	10/10	+0.1/+3.2
328	p-Hydrazinodiphenyl		m.127-128	S	C3H	1	Oil	I.P.	5	10/10	+0.7/+1.6
329	α-Hydrazino ethyl acetate . HCl		m.151-153	S37	Web.	0.5	Aqueous	Oral (tube)	4	10/10	-0.6/+0.2

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINISTRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
330	Hydrazino ethyl formate		m. 40	BA	C3H	0.07	Aqueous	Oral (tube)	8	7/7	+1.7 / +2.3
331	α-Hydrazino-β-phenylpropionic acid		m.196	C3HS	C3H	6	"	I.P.	9	8/8	-0.7 / +1.3
332	α-Hydrazinopropionic acid		m.181-190	S37	Web.	1	"	"	4	8/10	-1.3 / +0.2
333	p-Hydrazino stilbene			S37	Web.	3	"	"	8	10/10	+1.2 / +2.9
				S	C3H	2	Oil	"	6	10/10	+3.8 / +2.6
334	1-Hydroxy-2-carboxydibenzofuran			S37	Web.	1	Aqueous	"	8	10/10	-0.4 / +0.4
335	3-Hydroxy-4-carboxyphenyl hydrazone of acetaldehyde			S37	Web.	6	"	"	7	10/10	+0.8 / +2.0
336	3-N-bis(2-Hydroxyethyl) amino quinoline	B	m.197-199	S37	Web.	1	"	"	7	10/10	+1.5 / +4.3
337	N-Hydroxyethyl morpholine			S37	Web.	8	"	"	8	10/10	+0.7 / +3.1
338	2-Hydroxy-3-naphthoic acid hydrazide			S180	Web.	2	Oil	"	7	10/10	+0.9 / +1.6
339	2(β'-Hydroxy-γ-trichloropropyl) quinoline			S180	Web.	5	"	Oral (tube)	8	10/10	+0.9 / +0.3
340	Lauryldimethylamine			S37	Web.	4	"	I.P.	5	10/10	+0.2 / +1.5
341	Levulinic acid			S37	Web.	20-40	Aqueous	Oral (tube)	7	10/10	-1.2 / +2.1
342	Linalool	DPI		S	C3H	8	Oil	I.P.	8	10/10	+0.8 / +1.6
343	Mesoxalic acid phenylhydrazone		m.152	S	C3H	1.5	Aqueous	"	10	5/6	+5.5 / +3.3

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINISTRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
344	1-[2'-(6'-Methoxy) quinolyl]-2-p-dimethylaminophenyl ethylene		m.206	S180	Web.	6.5	Diet	Oral	9	10/10	-3.3 / +0.7
345	1-[2'-(6'-Methoxy) quinolyl]-2-imino-2-p-dimethylaminophenylethane			S180	Web.	7	"	"	9	10/10	+0.2 / +1.0
346	1-[2'-(6'-Methoxy) quinolyl]-2-p-nitro-phenylethylene			S37	Web.	4	Oil	Oral (tube)	6	10/10	-1.0 / +3.0
				S37	Web.	4	Aqueous	I.P.	9	10/10	-0.4 / +2.8
347	α-Methyl-benzyl diethanolamine			S37	Web.	1.5	Oil	"	8	9/10	-0.7 / +1.0
348	p-Methyldiphenyl			S37	Web.	1	"	"	4	10/10	+1.0 / +2.1
349	N-(Methyl)$_x$-p-hydrazinodiphenyl		m.200-257	BA	C3H	1	"	"	5	7/7	+4.2 / +3.3
350	p-Methyl-o'-nitro diphenyl			S37	Web.	1	"	"	4	7/7	+1.9 / 0
				S37	Web.	0.8	"	"	4	10/10	+0.6 / +2.0
351	p-Methyl-p'-nitro diphenyl			S37	Web.	1	"	"	5	10/10	+2.2 / +1.8
352	α-Methyl-α-phenyl hydrazine			S37	Web.	2	"	"	5	10/10	+1.3 / +1.5
353	Mono(p-chlorophenyl) diphosphoramic acid			S37	Web.	2	Aqueous	"	7	10/10	+2.5 / +2.6
354	N-(β-naphthyl) furamide		m.153	S37	Web.	3	"	Oral	9	10/10	+3.2 / +2.8
355	α-Naphthyl hydrazine			S37	Web.	1	Oil	I.P.	7	10/10	+0.2 / +1.1
356	β-Naphthyl hydrazine hydrochloride			S37	Web.	1	"	"	6	10/10	+0.7 / +2.9

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
357	Nicotinic acid hydrazide		m.164	S37	Web.	0.25	Aqueous	I.P.	7	10/10	+1.3 / +1.6
358	p-Nitrobenz-N-(2-quinolyl) hydrazide		m.225	S37	Web.	2	Oil	"	8	10/10	+0.3 / +0.4
359	5-Nitro-N-(benzyl) furanacrylic acid amide			S180	Web.	12	Diet	Oral	9	9/10	-1.0 / +0.3
360	5-Nitro-N-(p-ethoxyphenyl) furanacrylic acid amide		m.218	S180	Web.	15	"	"	9	9/10	+1.5 / -0.9
361	5-Nitro-α-ethyl furanacrylic acid			S180	Web.	10	"	"	9	11/12	-1.3 / +3.4
362	5-Nitrofuranacrylic acid			S180	Web.	15	"	"	9	9/10	+0.7 / -0.3
363	bis-/2-(5-Nitro) furyl/ azine			S180	Web.	12	"	"	9	9/10	+0.2 / +1.8
364	5-Nitro-N-(p-nitrophenyl) furanacrylic acid amide			S180	Web.	3	Aqueous	I.P.	4	9/10	+0.9 / +2.7
365	p-Nitrophenyl hydrazone of pyruvic acid			S37	Web.	2	"	"	8	9/10	+3.5 / +1.3
366	N-p-Nitrophenyl nicotinamide			S37	Web.	2	"	"	4	10/10	-0.3 / +1.7
367	2-Nitroterephthalic acid			S37	Web.	6	"	"	8	10/10	+0.5 / +0.4
368	Norcamphanemethanol			S37	Web.	4	Oil	"	8	10/10	+2.3 / +1.2
369	1-Phenyl-3-carboxy-5-pyrazolone		m.260	S37	Web.	3	Aqueous	"	6	11/11	+3.4 / +3.1
370	α-Phenyl-β(2-quinolyl) hydrazine			S37	Web.	1.5	Oil	"	7	10/10	+1.7 / +1.2
				C3HS	C3H	0.5	Aqueous	"	11	6/7	+3.3 / +3.3

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINISTRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
371	Poly acetyl-p-hydrazino diphenyl		m.200	BA	C3H	2	Oil	I.P.	5	7/7	+4.9 / +3.3
372	Potassium-3-nitrophthalimide			S37	Web.	12	Aqueous	"	7	10/10	+1.0 / +0.4
373	Potassium-4-nitrophthalimide			S37	Web.	12	"	"	7	10/10	+0.4 / +0.4
374	Pyranaldehyde	Shell		S37	Web.	2	Oil	"	5	10/10	+3.7 / +1.7
375	Pyruvic acid-2-benzothiazolyl hydrazone			S37	Web.	2	Aqueous	"	7	8/10	+1.2 / +1.5
376	Pyruvic acid-(p-diphenyl) hydrazone		m.197	S37	Web.	6	Oil	Oral (tube)	9	10/10	-0.6 / +2.9
377	3-Quinoline carboxylic acid amide			S37	Web.	0.5	Aqueous	I.P.	8	10/10	+0.4 / +2.3
378	4-Quinolyl acrylic acid		m.255	S180	Web.	10	Diet	Oral	9	10/10	-1.4 / +1.4
379	N'-(3-Quinolyl)-p-aminobenzamide		m.296	S37	Web.	4	Aqueous	I.P.	8	10/10	+3.0 / +2.0
380	N-(3-Quinolyl) benzamide			S37	Web.	5	"	"	8	9/10	+1.7 / +2.3
381	N-(3-Quinolyl) furamide		m.180	S37	Web.	2	"	"	9	10/10	+3.0 / +2.8
382	2-Quinolyl hydrazine		m.142-144	S37	Web.	0.75	"	"	6	8/8	+1.6 / +3.5
383	1-(2'-Quinolyl)-2-hydroxy-2-p-dimethyl aminophenylethane			S180	Web.	8	Diet	Oral	9	10/10	-1.1 / +3.0
384	1-(2'-Quinolyl)-2-imino-2-p-dimethyl aminophenylethane			S180	Web.	5	"	"	9	9/9	-1.9 / +3.0
385	Salicylaldehydephenylhydrazone			C3HS	C3H	2.5	Aqueous	I.P.	11	4/7	-0.2 / +1.3

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	RATIO LIVING/ CONTROLS	RATIO WT. GAINED/ CONTROLS
386	Sulfazan			S37	Web.	0.3	Aqueous	I. P.	8	10/10	+1.1 / +1.1
387	2-Thiopheneacrylic acid		m.144	S180	Web.	4	"	"	5	10/10	+1.8 / +0.8
388	Tolidinediformamide			S37	Web.	20	"	Oral (tube)	10	10/10	-0.2 / +3.0
389	Di-(p-Tolyl)-phosphinic acid		m.136	S37	Web.	1.5	Oil	I.P.	7	10/10	+1.1 / +1.1

In all experiments treatment was started one day after tumor implantation.

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	DAYS SURVIVED/ CONTROLS
390	p-Acetaminophenyl sulfonhydrazide		m.183-184	C1498	C57	3	Aqueous	I.P.	8	18/18
391	Acetylated p,p'-dihydrazinodiphenyl		m.206	"	"	2	Oil	"	6	15/15
392	N-Acetyl-p-hydrazinodiphenyl		m.208-210	"	"	2	"	"	5	13/13
393	N-Acetyl-p-hydrazinodiphenyl		m.172-173	"	"	2	"	"	5	13/13
394	Acetylphenylhydrazine			"	"	0.2	Aqueous	Oral (tube)	10	15/15
395	o-Aminobenzhydrazide			"	"	0.33	"	"	8	19/21
396	p-Aminobenzhydrazide		m.222	"	"	1	"	"	7	20/21
397	4-Aminophthalimide			"	"	0.5	"	I.P.	6	15/15
398	p-Aminosalicylic acid hydrazide		m.194-197.5	"	"	2	"	Oral (tube)	6	14/15
399	Aminothiouracil		m. > 350	"	"	3	"	"	12	16/15
400	N-(2-Benzimidazolyl) furamide		m.285	"	"	0.4	"	I.P.	7	13.8/13.4

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	DAYS SURVIVED/ CONTROLS
401	2,6-Benzthiazoledifuramide		m.243-245	C1498	C57	1.5	Aqueous	I.P.	6	13/13
402	N-(2-Benzthiazolyl) furamide		m.178	"	"	0.4	"	"	6	14.3/13.4
403	p-Bromobenzenesulfonamide			"	"	1.5	"	"	8	16/15
404	p-Bromomaleinanilic acid		m.196-197	"	"	2	"	"	6	14.6/13.2
405	p-Bromophenylhydrazine hydrochloride			"	"	0.7	"	Oral (tube)	6	15/15
406	Butazolidin	Geigy		P1534	DBA	2.5	"	"	10	13.3/12
407	Carbamylguanidine sulfate	Am. Cyanamid		C1498	C57	8	"	"	10	14.5/14.5
408	Carbohydrazide		m.154-156	"	"	0.4	"	"	9	15/15
409	Catechol bis benzenesulfonate			"	"	6	"	I.P.	9	16/17
410	2-Chloro-3-methyl-quinoxaline		m.79	"	"	2	"	Oral (tube)	11	15/15
411	Cinchoninic acid hydrazide			"	"	0.2	"	"	11	15/15
412	p,p'-Diaminodiphenylether		m.192-193	"	"	1	"	I.P.	9	13.8/13.5
413	Dicarbamylhydrazine			"	"	1	"	"	9	15/15
414	2,5-Dichlorophenylhydrazine			"	"	0.8	"	Oral (tube)	13	18/18
415	2,5-Dichlorophenylhydrazine-4-sulfonic acid			"	"	6	"	"	14	18/18
416	Dicyandiamide	Am. Cyanamid		"	"	7	"	"	11	14.5/14.5
417	p,p'-Dihydrazinobiphenyl		m.176-179	"	"	0.5	"	I.P.	7	15/15
				P1534	DBA	0.5	"	"	6	13.9/14.7
418	p,p'-Dihydrazinodiphenylether dihydrochloride		m.227	C1498	C57	1	"	"	6	13.5/13.5
				P1534	DBA	1	"	"	6	14.3/14.7
419	α,β-Dihydrazinohydrocinnamic acid		m.160-161	C1498	C57	1	"	Oral (tube)	8	16/16

ENTRY NO.	COMPOUND NAME	COM-FOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	DAYS SURVIVED/ CONTROLS
420	3-N-bis(2,3-Dihydroxypropyl) aminoquinoline hydrochloride		m.242-243	C1498	C57	1	Aqueous	I.P.	7	16/16
421	2,3-Dihydroxy-quinoxaline		m. > 300	"	"	2	"	"	6	12.7/11.9
422	p,p'-Dimethylaminodiphenylether		m.95	"	"	0.16	"	"	11	14.7/14.7
423	α,α'-Dimethyl hydrazinodiphenyl dihydriodide		m.180-195	"	"	0.3	"	"	5	14/14
424	Di-β-naphthyl-p-phenylenediamine			"	"	2	Oil	"	6	15/15
425	2,4-Dinitrophenyl hydrazine			"	"	0.5	Aqueous	"	10	15/15
426	N,N'-Diphenylbenzidine	DPI		"	"	2	Oil	"	6	15/15
427	5-Diphenylcarbazone			"	"	4	"	Oral (tube)	6	16/16
				P1534	DBA	2		I.V.	5x	7/7
428	Diphenylether hydrazine hydrochloride		m.180-182	C1498	C57	1	Aqueous	I.P.	8	14/14.9
429	α,α-Diphenyl hydrazine hydrochloride	DPI		"	"	1	"	"	6	15/14
430	Di(trimethyldiphenylether) ammonium iodide		m.212-213	"	"	0.0	"	"	6	13.9/14
431	Ethyl diaceto succinate			"	"	3	"	Oral (tube)	6	14/13.7
432	Ethyl (2-hydroxy-3-quinoxalyl)acetate		m.205-207	"	"	3	"	"	12	14/15
433	β-Formylpropion-N-phenylhydrazide-phenylhydrazone			"	"	2	"	I.P.	12	15/18
434	Furanacrylic acid hydrazide		m.81-84	"	"	2	"	Oral (tube)	13	18/19
435	2-Furfurylthiol			"	"	0.6	P.G.	Oral	7	14.5/14.5
436	Glyoxal-carbohydrazide polymer			"	"	0.4		I.V.	6	15/15
437	Glyoxal-hydrazine polymer			"	"	2		"	5	15/15
438	N-(Guanidino) iminopyruvic acid		m. > 240	P1534	DBA	3	Aqueous	I.P.	12	7/7

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	DAYS SURVIVED/ CONTROLS
439	p-Hydrazinobenzoic acid	DPI		C1498	C57	0.5	Aqueous	I.P.	9	18/18
440	2-Hydrazinobenzothiazole	DPI		"	"	0.66	"	"	7	16/16
441	p-Hydrazinodiphenyl hydrochloride			"	"	1	"	"	6	15/16
442	α-Hydrazino-ethyl-acetate . HCl		m.151-153	"	"	0.17	"	Oral (tube)	6	16/16
443	Hydrazino-ethyl-formate		m.~40	"	"	0.07	"	"	9	16/15
				P1534	DBA	0.1	"	"	11	14.6/14.7
444	Bis(p-Hydrazinophenyl) sulfone dihydrochloride			C1498	C57	1	"	I.P.	6	13.7/13.7
				P1534	DBA	1	"	"	6	13.9/14.7
445	α-Hydrazino-β-phenyl-propionic acid		m.196	C1498	C57	2	"	Oral (tube)	10	14/15
446	α-Hydrazinopropionic acid		m.181-190	"	"	0.5	"	"	8	17/16
447	p-Hydrazinostilbene			"	"	3	"	I.P.	11	17/17
				P1534	DBA	3	"	"	15	6/7
448	4-Hydrazino-m-toluenesulfonic acid	Antara		C1498	C57	3	"	"	9	15/15
449	o-Hydroxybenzhydrazide			"	"	1.5	"	Oral (tube)	7	16/16
450	p-Hydroxybenzhydrazide			"	"	3	"	"	9	15/18
451	3-N-bis(2-Hydroxyethyl) aminoquinoline		m.197-199	"	"	1	"	I.P.	7	16/17
452	N, N-di-(2-Hydroxyethyl) biphenylamine		m.150-154	"	"	1.5	"	"	9	17/18
453	Isonicotinic acid hydrazide			"	"	0.33	"	Oral (tube)	13	18/21
454	Ita-dibromo-pyrotartaric acid		decomp.	"	"	2	"	I.P.	8	14/14
455	α-Ketoglutaric acid phenylhydrazone		m.158	"	"	4	"	"	7	14d/14
456	2-Mercapto-quinoline		m.174	"	"	2	"	"	10	13.4/13.4

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	DAYS SURVIVED/ CONTROLS
457	α-Methyl-β-diphenyl-ether-hydrazide hydriodide		m.166	C1498	C57	1	Aqueous	I.P.	8	13.7/14.9
458	N-(Methyl)x-p-hydrazinodiphenyl		m.200-257	"	"	1.5	"	"	6	14.3/14.3
459	2-Methyl-3-hydra-zinoquinoxaline		m.167-171	"	"	1	"	"	10	16/16
460	2-Methyl-3-hydroxyquinoxaline		m.240-241	"	"	7	"	Oral (tube)	7	15/17
461	2-Methyl-1,4-naphthohydroquinone			"	"	1	"	"	9	14/15
462	α-Methyl-α-phenyl-hydrazine	DPI		"	"	0.2	"	"	10	14/13
463	3-Methyl-1-phenyl-5-pyrazolone	Dow		"	"	2	"	I.P.	11	14.1/14.6
464	3-Methyl-1-p-phenylsulfonic acid, p-sulfophenyl-5-pyrazolone	DPI		"	"	10	"	Oral (tube)	12	14.7/14.7
465	3-Methylpyridazinone		m.107	"	"	2	"	"	15	19/18
466	Mono-ethyladipate hydrazide			"	"	6	"	"	11	17d/19
467	Mono-ethyl furmarate hydrazide		m.~115	"	"	0.5	"	I.P.	8	16/16
468	β-Naphthoic acid hydrazide			"	"	4	"	Oral (tube)	9	15/19
469	α-Naphthylhydrazine			"	"	1	"	"	6	15/15
470	β-Naphthylhydrazine hydrochloride			"	"	1	"	I.P.	7	15/17
471	Nicotinic acid hydrazide		m.164	"	"	0.4	"	"	12	16d/17
472	N-(Nicotinoyl) hydrazone of α-ketoglutaric acid			"	"	10	"	"	12	13d/15
473	p-Nitrophenylhydrazine	DPI		"	"	0.2	"	Oral (tube)	11	16/16
474	Phenylacetic thioether			"	"	1	"	I.P.	10	16/15
475	Phenylhydrazine	DPI		"	"	0.2	"	Oral (tube)	12	17/16
476	Phenylhydrazinesulfonic acid	DPI		"	"	7	"	"	14	17/16

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	HOST SPECIES, STRAIN	DOSE mg/mouse	VEHICLE	ROUTE OF ADMINIS-TRATION	NO. OF TREATMENTS OR DURATION OF FEEDING	DAYS SURVIVED/ CONTROLS
477	Poly-acetyl-p-hydrazino-diphenyl		m. 200	C1498	C57	2	Oil	I.P.	5	12/13
478	Pyruvic aldehyde-hydrazine polymer			"	"	0.2		I.V.	7	16/15
479	Quinaldinic acid hydrazide		m. 141-142	"	"	0.5	Aqueous	I.P.	9	14d/17
480	3-Quinoline carboxylic acid amide		m. 198-199	"	"	0.66	"	"	12	15d/14
481	3-Quinoline carboxylic acid hydrazide		m. 189-189.5	"	"	2	"	Oral (tube)	13	20/21
482	6-Quinolinic acid hydrazide			"	"	0.4	"	"	11	14/15
483	2-Quinolyl hydrazine		m. 142-145	"	"	0.22	"	I.P.	7	17/17
484	3-Quinolyl hydrazine			"	"	0.5	"	"	7	19/18
485	N'(3-Quinolyl)-sulfanilamide		m. 183-183.5	"	"	8	"	Oral (tube)	10	15/14
486	Semicarbazide hydrochloride	DPI		"	"	1	"	"	6	13.7/13.7
487	Sodium aconate			"	"	8	"	I.P.	10	17/17
488	Sulfanilhydrazide		m. 133	"	"	1	"	Oral (tube)	14	18/18
489	Sulfazan	Monsanto		"	"	0.25	"	I.P.	12	14/14
490	2,2',4,4'-Tetranitrodiphenylether			"	"	1	Oil	"	6	13.5/13.5
491	N-(2-Thiazolyl) furamide		m. 148	"	"	1.5	Aqueous	"	6	13/13
492	N-Trichloromethyl-thiotetrahydrophthalimide			"	"	0.25	"	"	12	15d/14
493	Triethyl aconitate		liquid	"	"	12	"	Oral (tube)	12	14/14

In all experiments treatment was started one day after tumor implantation.

TESTS OF COMPOUNDS AGAINST VARIOUS EXPERIMENTAL TUMORS

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All the mouse tumors were carried by subcutaneous trocar implantation in the right axilla. The Brown-Pearce tumor, the only rabbit tumor employed, was carried in the anterior chamber of the eye. The following tumors have been used in these experiments:

Mammary adenocarcinoma 755
" " RC
" " Eo771
Crocker Sarcoma 180
Lymphosarcoma 6C3HED
Leukemia C1498
Leukemia 9417
Brown-Pearce Squamous Cell Carcinoma

In experiments with the lymphosarcoma and the two leukemias, the carcinostatic effect was determined by the criterion of prolongation of life. In experiments with all the other tumors, the final tumor weights in the treated and untreated groups were compared.

In essentially all the experiments involving the 755 tumor, a group of animals treated with 8-azaguanine was included to confirm the usual response of the tumor to a demonstrated carcinostatic agent.

Some of these data have been presented in earlier publications from this laboratory (Cancer Research 10:170, 1950; 12:524, 1952; Brit. J. Cancer 4:103, 1950; First Symp. Chem.-Biol. Correlation 1950, pp. 398-401).

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	TUMOR	AGE OF TUMOR DAYS	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls+	NO. OF TREATMENTS	VEHICLE	REMARKS
	BENZIMIDAZOLES:										
494	5-Aminobenzimidazole .2HCl	Bahner	755	2	C57	1/10	50	+6/0	11	H_2O	
495	5-(or 6-) Chlorobenzimidazole .HCl	"	755	2	"	2/10	50	+3/0	11-13	"	
496	2-(1-Hydroxyethyl) benzimidazole	"	755	2	"	0/10	50	-2/0	11	"	
497	2-Hydroxymethylbenzimidazole	"	755	1-2	"	6/50	25-200	+2/+11	11-16	"	
			S180	1	Paris	0/10	50	-7/-10	8	"	
			6C3HED	1	C3H		100		16	"	Life not prolonged
	BENZOTRIAZOLES:										
498	Benzotriazole	"	755	1-2	C57	1/40	50-150	-6/+5	11-15	"	
			S180	1	Paris	0/20	50	0/+4	9	"	
499	6-Chlorobenzotriazole	"	755	2	C57	1/30	50	0/-3	11-15	NaOH to pH8	
			S180	1	Paris	0/20	50	+2/+4	9	"	
500	6-Nitrobenzotriazole	"	755	2	C57	4/30	50	-6/-5	11-15	"	
			S180	1	Paris	0/20	50	+2/+4	9	"	
	PYRIMIDINES:										
501	2-Amino-4-hydroxy-5-diazo-6-isonitrosomethylpyrimidine	Engelman	755	4	C57	3/10	50→25	+14/+11	16	"	
			S180	5	Longacre	1/10	25	-20/-9	10	"	
			6C3HED	1	C3H		25→12.5		9	"	Life not prolonged
502	2-Amino-4-hydroxy-6-methylpyrimidine	"	755	3	C57	1/10	500	0/+4	15	Saline	
503	2,6-Diamino-4-hydroxy-5-methylpyrimidine	"	755	5	C57	0/10	50	-2/+3	9	"	
504	2,4-Dihydroxy-5-diazo-6-isonitrosomethyl-pyrimidine	"	755	5	C57	1/10	50	0/+3	10	NaOH to pH8	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	TUMOR	AGE OF TUMOR DAYS	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls+	NO. OF TREATMENTS	VEHICLE	REMARKS
505	5-Nitro-6-methyl-2,4-pyrimidindiol	Engelman	755	5	C57	1/10	50	-11/+3	10	NaOH to pH8	
			C1498	3	C57		50→35→25			"	All dead in 3 days
			S180	1	C57	2/10	35→25→20→15	-7/-12	9	"	
506	2-Thio-4-hydroxy-5-methyl-6-amino-pyrimidine	"	755	7	C57	8/10	100→50→35	-16/+4	13	"	
			C1498	3	C57		50→25			"	" " "
			S180	1	C57	10/10	35→25			"	" " "
	FUSED PYRIMIDINES:										
507	5-Amino-7-hydroxy[3,1,2]oxadiazolo[5,1d]pyrimidine	Lederle	755	1	C57	6/10	75→60→40	-23/+1	12	"	
			S180	1	C57	1/10	50→25	-15/+8	8	"	
			Eo771	1	Paris	0/10	40	-10/+4	6	"	
508	2-Amino-6-hydroxy-7-pyrazolopyrimidine	Engelman	755	7-8	C57	0/29	50	+1/+6	10-12	"	
			S180	5	Longacre	1/10	50	-14/-9	10	"	
			6C3HED	1	C3H		50		15		Life not prolonged
509	2-Amino-6-hydroxy-9-pyrazolopyrimidine	"	755	3	C57	7/10	150→100→75 →50→25	-20/+9	13	"	
			C1498	3	C57		"		11	"	Life not prolonged
			S180	1	C57	0/10	"	-13/-12	9	"	
510	5-Amino-7-hydroxy-1H-s-triazolo(d)pyrimidine-(8-azaguanine)	Lederle	S180	1	Paris	2/30	50	0/0	9-14	"	
			9417	1	AKR		50		12	"	Life not prolonged
			6C3HED	0	C3H		50		21	"	" " "
			C1498	1	C57		50		13	"	" " "
511	Diacetyl-8-azaguanine	Engelman	755	7	C57	1/10	300	+4/+4	7	10% Gum acacia	
			C1498	3	C57		400→300		11	"	" " "
			S180	1	C57	0/10	400→300	+6/-12	9	"	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	TUMOR	AGE OF TUMOR DAYS	HOST OR MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls+	NO. OF TREATMENTS	VEHICLE	REMARKS
512	5,7-Dihydroxy/3,1,2/oxadiazolo/4,5d/ pyrimidine	Lederle	755	1	C57	0/10	50	+7/+5	10-12	NaOH to pH8	
			S180	1	C57	0/10	50	+10/+8	8	"	
			Eo771	1	Paris	0/10	50	+4/+4	6	"	
513	5,7-Diaminotriazolopyrimidine	Bahner	755	1-2	C57	7/20	30	+1/+4	11-14	"	
514	2,6-Dihydroxy-7-pyrazolopyrimidine	Engelman	755	5	C57	1/10	50	-6/+3	9	"	
515	5,7-Dihydroxy-1H-s-triazolo(d)pyrimidine (8-azaxanthine)	"	755	7-8	C57	0/30	50-300	+2/+6	10-13	"	
			S180	5	C57	0/10	50-300	+3/-9	9-10	"	
			Eo771	1	C57	0/10	300	+5/+3	9	"	
			RC	1	DBA	1/10	300	-8/-3	7	"	
			B. P.	3	Rabbit	0/5	100	+2/+5	4	"	
			6C3HED	1	C3H		50		17	"	Life not prolonged
			C1498	1	C57		300		11	"	" " "
516	5,7-Dimethyltetrazolopyrimidine	Sterling-Winthrop	755	1	C57	2/10	100→75	+6/+4	15	Saline	
517	N'-Methylsulfonic acid of 8-azaguanine	Engelman	755	3	C57	0/10	500	+5/+9	13	"	
			C1498	3	C57		500		12	"	" " "
			S180	1	C57	0/10	500	-2/-12	9	"	
	QUINOXALINES:										
518	6-Chloroquinoxaline	Bahner	755	1-2	C57	5/20	50	+1/0	11	H_2O	
519	6-Chloroquinoxaline methyliodide	"	755	1	C57	7/10	25→15→10	-13/+14	13	"	
	THEOBROMINE DERIVATIVES:										
520	1-Allyl-	Natl. Research Council	755	3	C57	5/10	60-50	-1/+8	12	"	
521	1-(2-Butenyl)-		755	3	C57	3/10	125	-5/+8	12	"	

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	AGE OF TUMOR DAYS	HOST OR MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls+	NO. OF TREATMENTS	VEHICLE	REMARKS
	THEOBROMINE DERIVATIVES:										
522	1-Butyl-	Natl. Research Council	755	3	C57	4/10	125	-3/+8	12	H_2O	
523	1-Ethyl-		755	3	C57	5/10	125-60	-9/+8	12	"	
524	1-Isoamyl-	"	755	3	C57	1/10	125	+8/+8	12	"	
525	1-(2-Methoxyethyl)-	"	755	3	C57	1/10	125	+5/+8	12	"	
526	1-(2-Methylallyl)-	"	755	3	C57	7/10	125-100	-2/+8	12	"	
527	1-Propyl-	"	755	3	C57	2/10	125	+3/+8	12	"	
	MISCELLANEOUS:										
528	Chloroquine diphosphate	Sterling-Winthrop	755	1	C57	0/10	50	+9/+10	8	"	
			S180	1	Paris	0/10	50	0/+6	6	"	
529	Hexestrol di-iodoacetate	Refining Unincorp.	755	1	C57	7/20	25-12.5-5	+4/+7	7-10	30% Propylene Glycol	S.Q. injections
			S180	1	C57	0/10	5	+3/+4	7	"	" "
530	Methyl-bis(β-chloroethyl)amine (Nitrogen mustard)	Merck	755	10-14	C57	0/30	0.2-0.4		6-10	H_2O	" "
			B.P.	3	Rabbit	1/30	0.3		7	"	
531	Synkayvite	Hoffmann-La Roche	755	0	C57	0/30	175-125	+7/+8	16-18	Saline	
			RC	0	DBA	0/10	125	+2/+3	12	"	
			Eo771	1	C57	1/30	125	+5/+4	11	"	
			S180	1	Longacre	1/30	125	-5/-3	9	"	
			B.P.	3	Rabbit	0/2	50	+1/0	7	"	

+ Percent change in weight of treated animals/percent change in weight of controls.

Bahner = Dr. C. T. Bahner, Dept. of Chemistry, Carson-Newman College, Jefferson City, Tennessee.

Engelman = Dr. M. Engelman, Francis Delafield Hospital, New York 32, N. Y.

B.P. = Brown-Pearce Tumor

All injections I.P. except the three instances listed under Remarks.

SARCOMA 180 INHIBITION TESTS

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The testing of compounds for their ability to inhibit the growth of sarcoma 180 in mice is carried out in the following manner: Beginning on the third day after subcutaneous implantation of the tumor, 1/3 to 1/5 of the lethal intraperitoneal dose of the test agent is administered daily for five days. Six hours after the final injection, the tumors are removed from the control and test animals and then weighed. When the ratio of treated to control tumor weights is 0.80 or greater, the test agent is rated as inactive. When the ratio is 0.51-0.79 the compounds are rated as questionable. When the ratio is 0.50 or less the compounds are rated as active. Compounds whose activity cannot be reproduced are also considered as inactive.

A-methopterin[2], a known inhibitor of S-180[3], gave the following result when tested by the procedure: At a dose of 4 mg/kg/day none of the 10 test animals died. The control animals gained 0.8 g. while the treated animals lost 2.2 g. The ratio of the treated to control tumor weights is 0.10 and therefore it is rated as active.

(1) This investigation was supported jointly by a research grant (C-802) from the National Cancer Institute of the National Institutes of Health, U.S.P.H.S. and the Midwest Research Institute.

(2) We wish to thank the Lederle Laboratories for the gift of this material.

(3) Moore, A. E., Stock, C. C., Sugiura, K. and Rhoads, C. P. Inhibition of the Development of Sarcoma 180 by 4-amino-N^{10}-methyl pteroylglutamic acid. Proc. Soc. Exper. Biol. & Med., 70, 396 (1949).

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
532	N-Allyl-2-ethyl-2-hexene-1-imine	M.R.I.	b. 83-85 12 mm.	CAF_1	0/10	20	-0.1 / +0.2	3% Gelatin
533	N-Allyl-furamide	"	b. 103 0.7 mm.	C	0/10	40	-1.5 / -0.2	"
534	3-Allyl-4-hydroxy-benzaldehyde-3-thiosemicarbazone	"	m. 170.5-173	CAF_1	0/10	50	-0.9 / -0.4	"
535	p-Aminobenzoic acid hydrazide	"	m. 218-222	C	0/10	80	-0.2 / -0.4	"
536	2-Aminoheptoic acid	"	m. 294 dec.	CAF_1	0/10	75	-1.2 / +0.2	"
537	2-Amino-4-phenyl-butyric acid	"	m. 252-256 dec.	CAF_1	0/10	150	-0.6 / -0.4	"
538	2-Amino-5-phenyl-valeric acid	"	m. 239-241 dec.	C	0/10	300	-0.4 / -0.4	"
539	α-Anilino-desoxy-piperonyloin	U. of Va.	m. 136-137	C	0/10	500-400[a]	-1.0 / -0.7	"
540	Benzalazine	M.R.I.	m. 93-95	C	0/10	400	+1.3 / -0.4	"
541	Benzaldehyde bis-(2-aminoethylthio)-acetal . HCl	"	m. 198-200	CAF_1	0/20	20	-1.1 / -0.6	"
542	N-Benzoyl-2-benzoyl-propionamide	U. of Va.	m. 109	C	0/10	800-400[a]	-1.4 / +0.8	"
543	N-Benzoyl-deca-hydroquinoline	M.R.I.	b. 135 0.2 mm.	CAF_1	4/10	200	-1.8 / -0.9	"
544	Benzoyl peroxide	Novadel Agene	m. 105 dec.	CAF_1	0/10	250	-3.5 / 0.0	"
545	ω-Benzylethanolamino-acetophenone	U. of Va.	m. 153.5	CAF_1	5/15	200	-2.4 / -0.8	H_2O
546	3-d-Camphoraldehyde-3-thio-semicarbazone	M.R.I.	m. 182.5-184.5	CAF_1	0/10	40	-0.3 / +0.5	3% Gelatin

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
547	2-Chlorobenzoic acid hydrazide	M.R.I.	m.117-118.5	C	0/10	10	+0.8 / -0.4	3% Gelatin
548	4-Chlorobenzoic acid hydrazide	"	m.164.5-167	C	0/10	80	-1.5 / -0.4	"
549	p-Chlorophenyl-glyoxal hydrate	Carson-Newman	m.122 dec.	CAF_1	0/10	15	-1.0 / 0.0	"
550	N-Cinnamoyl-pyrrolidine	M.R.I.	m.99.5-101	CAF_1	0/20	100	-0.6 / -0.4	"
551	Coumarin	Monsanto	m.70-72	CAF_1	0/10	300	-0.8 / +0.5	"
552	3,5-Diallyl-4-hydroxy-benzaldehyde-3-thiosemicarbazone	M.R.I.	m.198-199.5	C	0/10	300	-2.6 / -0.9	"
553	N', N'-Diallylnicotinamide	"	b.120 0.3 mm.	CAF_1	5/20	200	-4.0 / -0.8	H_2O
554	N-Dichloroacetyl-decahydroquinoline	"	b.146 0.65 mm.	CAF_1	0/10	100	-0.9 / -0.1	3% Gelatin
555	N-Dichloroacetyl-N-phenyl-1-(2,3-di-methoxy-phenyl)-2-phenylethylamine	"	m.114-116	CAF_1	0/10	200	+0.2 / +0.5	"
556	2,2'-Dichloro-benzalazine	"	m.143-145	C	2/10	1000[b]	-1.1 / +0.8	"
557	2,4-Dichlorophenoxyacetic acid	Eastman	m.138-140	CAF_1	0/10	100	-0.2 / -0.2	"
558	α-(2,4-Dichloro-phenoxy)-butyric acid	M.R.I.	m.80-81	C	0/10	40	-0.7 / -0.5	"
559	N,N-Diethyl-1-(2-allyloxy-1-naphthyl)-2-phenylethylamine . HCl	"	m.75-80	C	0/10	50	-2.8 / -0.2	"
560	4,4'-bis-(Diethylamino)-benzalazine	"	m.188-188.5	C	0/10	1000	-1.9 / +0.8	"
561	2-p-Diethylamino-styryl-quinoline methiodide	Carson-Newman	m.224-226	CAF_1	0/10	5	-1.5 / -1.9	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
562	Diethyl-p-fluoro-phenacyl selenonium bromide	Carson-Newman	m. 96.5-99 dec.	CAF_1	0/10	15	-1.9 / 0.0	3% Gelatin
563	N, N-Di-(2-hydroxy-ethyl)-1-(3-camphoryl)-2-phenyl-ethylamine . HCl	M. R. I.	m. 202-204	C	1/10	50	-0.3 / -0.4	"
564	N, N-Di-(2-hydroxyethyl)-2, 4-diphenyl-2-amino-butane . HCl	"	m. 139-142	CAF_1	0/10	50	-1.1 / +0.2	"
565	1-(3', 4'-Dimethoxyphenyl)-2-nitroethanol	Purdue	m. 92-93.5	C	0/10	300	-0.3 / -0.6	"
566	4, 4'-bis-(Dimethylamino)-benzalazine	M. R. I.	m. 265-266.5	C	0/10	1000[c]	-1.9 / +0.1	
567	4-(p-Dimethylaminostyryl)-pyridine ethiodide	Carson-Newman	m. 255-256	C	0/10	5	-1.1 / -0.4	"
568	2-p-Dimethylaminostyryl-quinoline methiodide	Carson-Newman	m. 261-265	C	0/10	2	-0.2 / -0.5	"
569	1, 2-Diphenyl-2-chloroethylamine . HCl	M. R. I.	m. 254 dec.	CAF_1	2/10	125-100[a]	-2.1 / -1.3	H_2O
570	N, N-Di-(2-phenylethyl)-benzamide	"	b. 186-187 0.04 mm.	C	0/10	100	-1.8 / -0.4	3% Gelatin
571	N, N-Di-2-phenylethyl-4-hydroxy-benzamide	"	m. 133-135	C	0/10	500	-1.6 / -2.5	"
572	1, 2-Diphenyl-2-(N-methyl-N-benzylamine)-ethanol	U. of Va.	m. 72-73	C	0/10	250-200[a]	-1.3 / -0.7	"
573	2, 3-Diphenylmorpholine . HCl	"	m. 271-273 dec.	C	0/10	100-50[a]	+0.3 / +0.8	"
574	2, 3-Diphenyl-piperidine	Maltbie	m. 86.5-88	CAF_1	0/10	75	-1.6 / -0.7	"
575	2-(o-Ethoxystyryl)-quinoline methiodide	Carson-Newman	m. 224-226	C	0/10	2	-0.7 / -0.5	"
576	Ethyl diazoacetate	M. R. I.	b. 44 11.5 mm.	CAF_1	0/10	100	-0.7 / -0.7	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
577	N-Ethyl-1,2-di-phenylethylamine . HCl	M.R.I.	m.240-241	CAF_1	0/10	75	-2.2 / -1.3	H_2O
578	N-Ethyl-N-(2-hydroxyethyl)-1,4-di-phenyl-2-aminobutane . HCl	"	m.121-124	CAF_1	0/10	50	-0.2 / -0.4	3% Gelatin
579	N-Ethyl-N-(2-hydroxyethyl)-1,2-diphenyl-ethylamine . HCl	"	m.107-114	CAF_1	0/10	150	-2.3 / -0.7	"
580	p-Fluorophenacyl-β,β-dihydroxyethyl sulfonium chloride	Carson-Newman	m.106-109	C	0/10	50	-0.6 / -0.4	"
581	p-Fluorophenacyl-ethylmethylsulfonium bromide	"	m.127	C	0/10	50.	+0.2 / +0.1	"
582	α-Hydrindone semicarbazone	M.R.I.	m.230.5-233 dec.	CAF_1	0/10	300	-1.4 / +0.5	"
583	2,2'-bis-(2-Hydroxyethoxy)-benzalazine	"	m.160-165	C	0/10	1000[d]	-3.1 / +0.8	"
584	4-(2-Hydroxyethoxy)-benzaldehyde-3-thiosemicarbazone	"	m.183-184.5	CAF_1	0/10	250	-1.6 / +0.5	"
585	2-(2-Hydroxyethylamino)-camphane . HCl	"	m.183-186	CAF_1	0/10	50	-1.3 / -0.8	H_2O
586	N-(2-Hydroxyethyl)-cinnamamide	"	m.101-103.5	CAF_1	0/10	200	-1.4 / -0.4	3% Gelatin
587	N-(2-Hydroxyethyl)-1-(2-hydroxy-1-naphthyl)-2-phenylethylamine . HCl	"	m.166-169	C	0/20	50	-2.5 / -0.5	"
588	N-(2-Hydroxypropyl)-1-(4-methylphenyl)-2-phenylethylamine . HCl	"	m.173-177	CAF_1	6/10	200-100[a]	-2.8 / -1.9	"
589	Indoleacetic acid	Fisher Sci.	m.165-167	CAF_1	0/10	150	-1.6 / +0.5	"
590	o-Iodobenzoic acid	Eastman	m.161-162	CAF_1	0/10	150	-0.8 / +0.5	"
591	o-Iodobenzoic acid hydrazide	M.R.I.	m.195-197	C	0/10	25	-0.7 / +0.8	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
592	2,5-bis-(1-Iodo-3-cyano-1-pyridyl) hexane	Carson-Newman	m. 243	C	0/10	10	-0.2 / -0.5	3% Gelatin
593	DL-Iso-1,2-diphenyl-ethanolamine . HCl	M. R. I.	m. 207-208	CAF_1	1/10	75	-1.4 / -0.4	H_2O
594	Isopropylphenyl-carbamate	Pittsburg Coke	86-88	C	0/10	200	-1.9 / -0.9	3% Gelatin
595	Maleic hydrazide	Naugatuck Chem.	over 265	C	0/10	300	-0.9 / -0.4	"
596	Malonic acid	Eastman	m. 134-135	CAF_1	0/10	20	-0.5 / 0.0	"
597	Malonic acid dihydrazide	M. R. I.	m. 156.5-158.5	C	0/10	1000	-1.8 / +0.1	"
598	1-Mesityl-2-(N-piperidyl)-ethanol . HCl	U. of Va.	m. 244 dec.	C	0/10	40-20[a]	-0.2 / +0.8	"
599	1-p-Methoxyphenyl-2-phenyl-2-N-butylaminoethanol . HCl	"	m. 207-208	CAF_1	0/10	20	-0.6 / -0.4	"
600	1-(3', 4'-Methylene-dioxyphenyl)-2-nitroethanol	Purdue	m. 95-96	C	0/10	200	-1.4 / -0.6	"
601	2-N-Morpholino-1,2-diphenylethanone . HCl	U. of Va.	m. 200-201	C	1/10	150-100[a]	-0.3 / -0.7	"
602	β-Naphthacyl-diethyl sulfonium bromide	Carson-Newman	m. 127.5 dec.	CAF_1	0/10	40	-0.4 / 0.0	"
603	β-Naphthacyl-bis-(2-hydroxyethyl) sulfonium bromide	"	m. 120	C	0/20	20	-2.3 / -0.5	"
604	Nicotinic acid hydrazide	M. R. I.	m. 161.5-164	C	0/10	30	-0.7 / +0.1	"
605	3-Nitrobenzaldehyde-3-thiosemicarbazone	"	m. 216-217	C	0/10	50	-1.0 / -0.5	"
606	p-Nitrobenzoic acid hydrazide	"	m. 217 dec.	C	0/10	80	-0.7 / -0.4	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
607	8-Oxa-9,9-pentamethylene-10-aza-bicyclo-[4,4,0]-decane	M.R.I.	b.81 0.02 mm.	CAF_1	0/10	10	+0.1 / -0.1	3% Gelatin
608	N-1,1-Pentamethylene-2-phenylethyl-N-3-amino-2-hydroxypropylamine . HCl	"	m.277 dec.	CAF_1	0/10	25	-0.6 / +0.2	"
609	1-(1,1-Pentamethylene-2-phenylethyl)-2-(2-hydroxyethyl)-piperidine . HCl	"	m.164-167.5 and 174	CAF_1	0/10	30	+0.8 / -0.1	"
610	4,4'-bis-(Phenacyl-hexamethylenetetraminium bromide) ether	Carson-Newman	m.146	CAF_1	0/10	100	-1.9 / -0.7	"
611	Pentamethylene tetrazole	Bilhuber-Knoll	m.57-58	C	0/10	15	-0.7 / -0.4	"
612	N-Phenylacetyl-decahydroquinoline	M.R.I.	b.118 0.19 mm.	CAF_1	0/10	150	-0.6 / -0.4	"
613	2-Phenyl-2-(benzyl methylamino)-ethanol	U. of Va.	b.155-157 1.5 mm.	C	0/10	600-300[a]	-0.5 / +0.8	"
614	1-Phenyl-2-butyl-aminoethanol	"	m.60-61	C	0/10	7.5-5.0[a]	-1.5 / -0.7	"
615	2-Phenyl-2-butyl-aminoethanol	"	b.126.7 2 mm.	C	0/10	40-20[a]	-0.3 / +0.8	"
616	N-2-Phenylethyl-4-acetoxybenzamide	M.R.I.	m.153.5-156	C	0/10	250	-2.5 / -0.4	"
617	N,N-bis-(2-Phenylethyl)-amine . HCl	"	269-272	C	1/20	60	-2.0 / -0.7	"
618	2-Phenyl-2-ethyl-ethanolamino . acetic acid	U. of Va.	m.182-183 dec.	C	0/10	800-400[a]	0.0 / -0.2	"
619	Phenylglycine	Fisher	m.123-125	C	0/10	50	-0.9 / -0.9	"
620	2-Phenyl-2-methyl-3-(2-hydroxyethyl)-oxazolidine	M.R.I.	b.90-92 0.03 mm.	CAF_1	0/10	200	+0.3 / +0.2	"
621	1-(1-Piperidino)-1,2-diphenylethane . HCl	"	m.158 and 207-208.5	CAF_1	2/10	200-100[a]	-4.1 / -1.9	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	MOUSE STRAIN	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE treated/ controls	VEHICLE
622	α-N-Piperidyl-2,4,6-trimethylacetophenone . HCl	U. of Va.	m. 265-267	C	0/10	100-50[a]	+0.2 / +0.8	3% Gelatin
623	Taurine	M.R.I.	m. 285 dec.	C	0/10	1000	-0.4 / +0.8	"
624	Triallyl cyanurate	Cyanamid	b. 100 1 mm.	C	0/10	250	-0.1 / -0.6	"
625	2,4,6-Tribromoanisole	Eastman	m. 85-87	CAF_1	0/10	300	-0.7 / +0.5	"

a - Higher dose was given on first day and lower dose daily thereafter.

b - Only 400 mg/kg given on fourth and fifth days.

c - Only 500 mg/kg given on second and fifth days.

d - Only 500 mg/kg given on fifth day.

Compounds from the University of Virginia were supplied by Dr. Robert E. Lutz.

Compounds from the Carson-Newman College were submitted by Dr. Carl T. Bahner.

Compounds from Purdue University were submitted by Dr. G. Bryant Bachman.

The compound from Maltbie Laboratories was submitted by Dr. Lewis A. Walter.

M.R.I. - Midwest Research Institute

All tests were made against Sarcoma 180 by intraperitoneal injections started three days after tumor implantation. Five injections were made in every instance except with numbers 557 and 585 where seven injections were made.

TESTS AGAINST VARIOUS MOUSE TUMORS

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Solid tumors are transplanted by the trochar method. Mice employed; males, wts. 24-30 gm; females, 20-25 gm. If both sexes are employed, each test group is to have equal numbers of the two sexes. Number of animals per test group is not less then 10. Six days after transplanting, the animals are tested for palpable tumors, those without are rejected, those with are arranged so as to be as uniform in size of tumor and weights of animals as possible. The test compounds are administered daily by intraperitoneal injection, the vehicles being water, sesame oil or asymmetrical propylene glycol. The animal weights are checked every third day and caliper measurements taken every fifth day. After 2-3 weeks of treatment, the mice are weighed, sacrificed, tumors dissected out and weighed. The basis of decision is the tumor weights.

For compounds giving positive carcinostatic effects see: Gal, Fung, and Greenberg, Cancer Research, 12, 565, 1952.

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	HOST MOUSE STRAIN	NO. OF TEST ANIMALS	DOSE mg/mouse	NO. OF TREATMENTS	ROUTE OF ADMINIS-TRATION	AGE OF TUMOR	VEHICLE	REMARKS
626	α-Amino, β,γ-dihydroxy-butyric acid		S37	A	10	5	8	S.Q.	6 day	Phosphate buffer	
627	p-Aminophenylalanine		M.C.	C3H	20	0.5-2	14	I.P.	2 day	Propylene glycol	
628	Chloromycetin (Chloroamphenicol)	Parke, Davis	G.L.S.	C3H	6	1	8	"	6 day	Water	
629	3-Cyano-4, 6-dimethyl-2-pyridone		S37	A	8	1	8	"	"	Phosphate buffer	
630	Desthiobiotin	Nut. Bio. Corp.	S37	A	5	2	8	"	"	Water	
631	Diisopropyl fumarate		M.C.	C3H	20	4-20	14	"	7 day	Propylene glycol	
632	Dimethyl chlorofumarate		M.C.	C3H	20	.075-0.1	14		"	"	
633	Ethionine	U. S. Indust. Chem.	S37	A	10	12.5 + 5.7 methionine	10	S.Q.	6 day	Water	Weight loss and fatty liver
			G.L.S.	C3H	7	"	6	I.P.	"	"	" "
634	o-Fluorophenylalanine-HCl-H_2O		M.C.	C3H	20	0.25-1.0	11	"	2 day	Propylene glycol	50% mort., no other effect
635	Fumaronitrile		M.C.	C3H	20	0.125-0.75	14	"	7 day	"	
636	ω-Methyl pantothenic acid	M.S. Dunn UCLA	S37	A	5	5	8	"	6 day	Water	
637	Pyridine-3-sulfonic acid		Eo771	C57	15	40	21	"	2 day	Propylene glycol	66% mort., no other effect
638	Sodium pantoyl taurine	Nut. Bio. Corp.	S37	A	5	86	8	"	7 day	Water	

M.C. = Mammary Carcinoma

G.L.S. = Gardner Lymphosarcoma

Nut. Bio. Corp. = Nutritional Biochemical Corporation

TESTS OF COMPOUNDS AGAINST THE EHRLICH MOUSE ASCITES TUMOR

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Method of test employed with the Ehrlich mouse ascites tumor:

0.2 ml of the tumor ascites are injected I.P. to a control group of 5 mice (stock mice) and an experimental group of 5 mice. The substance to be tested is given to the experimental group I.P. the first day of transplantation and the following 4 days. The effect of a substance is estimated by 1) a difference of the weight curves between the control and the experimental group and 2) a difference of the survival time of the two groups.

Typically active compounds are represented as follows:

	Mg. in Solution	Mean survival time in days: Experimental group	Control group
Colchicine [1]	0.01 Ringer solution	26	14
N-Methyl-colchicamide [3]	0.0045 " "	32	20
Patulin (from penicillium patulum)	0.04 " "	28.5	15
Acriflavine [2]	0.125 " "	30	14
Aminopterin	0.006 " "	27	18

1) H. Lettré: Einige Beobachtungen über das Wachstum des Mäuse-Ascites-Tumors und seine Beeinflussing. Z. f. physiol. Chemie 268, 59 (1941); Nachtrag; ibid. 271, 190 (1941).

2) H. Lettré: Zur Wirkung von Trypaflavin auf den Mäuse-Ascites-Tumor. Z. f. physiol. Chemie 271, 192 (1941).

3) H. Lettré: Einige Versuche mit dem Mäuse-Ascites-Tumor. Z. f. Krebsforschung 57, 1 (1950).

ENTRY NO.	COMPOUND NAME	AMOUNT INJECTED mg/20 gm. mouse/day	VEHICLE
639	Adermine (pyridoxine . HCl)	5	Ringer solution
640	L-Alanine	1	" "
641	β-Alanine	1	" "
642	p-Aminobenzoic acid	1	" "
643	α-Amino-isobutyric acid	1	" "
644	Aneurine (Vitamin B_1)	0.5	" "
645	L-Arginine	1	" "
646	Ascorbic acid	1	" "
647	Auramine O	0.2	" "
648	Aureomycin	0.6	" "
649	Avil-Hoechst (antihistaminic)	1	" "
650	4'-Azabenzpyrene	1 x 1	Saline suspension
651	8-Azaguanine	2	Ringer solution
652	Berberine	0.2	" "
653	Bulbocapnine	0.5	" "
654	Cellobiose	2	" "
655	Chloromycetin	0.5	" "
656	Choline chloride	2	" "
657	Citronellal	3	Oil
658	Codeine	0.5	Ringer solution
659	Coelestine blue	0.5	" "
660	Compound A acetate	3 x 1	Suspension in Ringer solution
661	Compound F acetate	3 x 1	" " "
662	Cortisone (free alcohol)	3 x 1	" " "
663	Cortisone acetate	3 x 1	" " "
664	Creatine	1	Ringer solution
665	Creatine phosphoric acid (calcium salt)	1	" "
666	Dehydro epi-androsterone	3 x 1	Suspension in Ringer solution
667	Desoxycorticosterone acetate	3 x 1	" " "
668	Desoxycorticosterone 21-glucoside	3 x 1	" " "
669	Diethyl-stilbestrol	3 x 1	" " "
670	Dihydro compound F acetate	3 x 1	" " "
671	2.4-Dinitrocresol	0.2	Ringer solution

ENTRY NO.	COMPOUND NAME	AMOUNT INJECTED mg/20 gm. mouse/day	VEHICLE
672	Dulcite	10	Ringer solution
673	Equilinglycol	0.5	" "
674	Esmodil (Bayer)	0.05	" "
675	Estrone	3 x 1	Suspension in Ringer solution
676	Eupaverine (Merck)	0.2	Ringer solution
677	Fructose	20	" "
678	Gallocyanine	0.5	" "
679	Giaucine	0.25	" "
680	Glucose	10	" "
681	Gluconic acid (calcium salt)	10	" "
682	Glutamic acid	5	" "
683	Glutathione	1	" "
684	Glycine	1	" "
685	Hypoxanthine	1	" "
686	β-Indolylacetic acid	1	" "
687	Inositol	5	" "
688	Isamine blue	0.5	" "
689	Laudanosine	0.5	" "
690	L-Leucine	1	" "
691	L-Leucyl-glycine	1	" "
692	Luvistin (antihistaminic)	1	" "
693	L-Lysine	1	" "
694	Mannitol	5	" "
695	Marfanil (sulfonamide)	10	" "
696	Melibiose	10	" "
697	Mescaline	0.5	" "
698	Methionine	0.5	" "
699	Methionine-sulfoxyd	2	" "
700	N-Methyl-p-amino-benzoic acid	10	" "
701	Morphothebaine	0.5	" "
702	Narcotine	1	" "
703	Niacin	1	" "
704	p-Nitro-phenyl-arsenic acid	0.1	" "
705	Novocaine	0.5	" "

ENTRY NO.	COMPOUND NAME	AMOUNT INJECTED mg/20 gm. mouse/day	VEHICLE
706	Oxymethylfurfurol	2	Ringer solution
707	p-Oxypropiophenone	0.5	" "
708	Penicillin	5000 I.E.	" "
709	Phenylalanine	1	" "
710	Phlorrhizine	0.25	" "
711	Progesterone	3 x 1	Suspension in Ringer solution
712	Pyronine	0.1	Ringer solution
713	Raffinose	8	" "
714	Rhamnose	10	" "
715	Rutine	1	" "
716	Ribo nucleic acid (yeast)	1	" "
717	Sodium cyanate	0.5	" "
718	Soventol (antihistaminic)	1	" "
719	Spermin hydrochloride	1	" "
720	Strychnine	0.01	" "
721	Streptokinase	2000 units	" "
722	Streptomycin	1.5	" "
723	Succinic acid	12.5	" "
724	Terramycin	1	" "
725	Testosterone	3 x 1	Suspension in Ringer solution
726	Testosterone propionate	3 x 1	" " "
727	Thebaine	0.04	Ringer solution
728	Thiosinamine	1	" "
729	Thymonucleic acid	1	" "
730	Triethylenimin-melamine	0.0125	" "
731	Tryptamine	1	" "
732	L-Tryptophane	1	" "
733	Tyrosine	1	" "
734	L-Valine	1	" "
735	D-Valine	2	" "
736	Victoria blue	0.05	" "
737	Xylocaine	0.5	" "
738	l-Xylose	8	" "

STUDIES WITH A LYMPHOSARCOMA, SARCOMA 180 AND LEUKEMIA P1534 IN MICE

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Preliminary tests were made on mice to determine the maximum tolerated dose of the substance that could be administered over a 4-day period without loss of weight in mice averaging 18 - 20 grams. This dosage was used in the tests on leukemic and tumor-bearing mice as indicated. A similar group of controls received the carrier only. In the case of the lymphosarcoma and sarcoma 180, tumor size comparisons were made at 18-22 days, and difference in survival time was the criterion of effectiveness in leukemia P1534. When leukemic mice were given A-methopterin in daily doses of 1.76-3.53 mg. per Kg. body weight for a 9-day period, average survival time was 131 per cent as compared with controls; a similar increase was obtained with colchicine in I.P. doses of 0.584-0.875 mg. per Kg.

All compounds were furnished by Dr. Carl T. Bahner, Carson-Newman College. The studies reported have been supported by a grant from the Damon Runyon Memorial Fund, (DR1R-121).

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT +	MOUSE STRAIN	NO. OF ANIMALS	DOSE mg./inj.	ROUTE OF ADMINISTRATION	VEHICLE
739	p-Bromophenacylhexamethylene-tetraminium bromide	m.160	P1534	3 injs. pre-(-3,-2,-1) and 2 post-tumoral (6,8)	DBA	10	6	S.Q.	Olive oil
			"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	14	6	"	"
			S180	3 injs. post-tumoral (5,7,10)	Swiss Albino	10	3	"	"
			P1534	2 injs. pre-(-2,-1) and 2 post-tumoral (1,3)	DBA	10	6	I.P.	"
			"	1 inj. pre-(-1) and 3 post-tumoral (1,3,5)	"	10	1	"	"
			"	1 inj. pre-(-1) and 3 post-tumoral (1,3,5)	"	10	3	"	"
			"	1 inj. pre-(-1) and 3 post-tumoral (1,3,5)	"	10	6	"	"
			"	3 injs. post-tumoral (1,4,8)	"	10	1.25	S.Q.	"
			"	3 injs. post-tumoral (1,4,8)	"	10	1.75	"	"
			"	10 injs. post-tumoral (2 -11 incl)	"	15	0.625	I.P.	Water
740	p-Bromophenacylhexamethylene-tetraminium iodide	m.170-171 dec.	"	2 injs. pre-(-2,-1) and 2 post-tumoral (1,3)	"	10	6	"	Olive oil
741	p-Chlorophenacylhexamethylene-tetraminium bromide	m.151	"	3 injs. pre-(-3,-2,-1) and 2 post-tumoral (6,8)	"	10	6	S.Q.	"
			"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	6	"	"
			S180	3 injs. post-tumoral (5,7,10)	Swiss Albino	10	3	"	"
			Lympho-sarcoma	4 injs. post-tumoral (11,13,15,17)	ABC	10	6	"	"
			P1534	10 injs. post-tumoral (2 -11 inc.)	DBA	15	1	I.P.	Water

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT +	MOUSE STRAIN	NO. OF ANIMALS	DOSE mg./inj.	ROUTE OF ADMINIS-TRATION	VEHICLE
742	p-Chlorophenacylhexamethylene-tetraminium iodide	m.172-173 dec.	P1534	2 injs. pre-(-2,-1) and 2 post-tumoral (1,3)	DBA	10	6	I.P.	Olive oil
743	2,4-Dichlorophenacylhexamethylenetetraminium bromide	m.163	"	2 injs. pre-(-2,-1) and 2 post-tumoral (1,3)	"	10	3	"	"
			"	10 injs. post-tumoral (2 -11 inc.)	"	15	2	"	Water
744	2-p-Diethylaminostyrylpyridine methiodide	m.249-250	"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	2.4	S.Q.	Olive oil
745	1,6-Diemethylquinoxalinium iodide		"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	2.4	"	"
746	Ethylquinoxalinium iodide		"	8 injs. post-tumoral (1-9 inc.)	"	15	0.25	I.P.	Water
747	p-Fluorophenacyl-β,β'-dihydroxy-diethylsulfonium chloride		"	9 injs. post-tumoral (2-10 inc.)	"	11	2	"	"
748	p-Fluorophenacyldimethyl-sulfonium chloride		"	9 injs. post-tumoral (2-10 inc.)	"	11	4	"	"
749	p-Fluorophenacylhexamethylenetetraminium bromide	m.131-132	"	3 injs. pre-(-3,-2,-1) and 2 post-tumoral (6,8)	"	10	3	S.Q.	Olive oil
			"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	6	"	"
			S180	3 injs. post-tumoral (5,7,10)	Swiss Albino	10	3	"	"
			P1534	3 injs. post-tumoral (1,4,7)	DBA	10	6	"	"
			"	10 injs. post-tumoral (2-11 inc.)	"	15	2.5	I.P.	Water
750	2-(1-Hydroxyethyl) benzimidazole		"	9 injs. post-tumoral (2-10 inc.)	"	11	1.25	"	"
751	p-Iodophenacylhexamethylene-tetraminium iodide	m.180-181 dec.	"	2 injs. pre-(-2,-1) and 2 post-tumoral (1,3)	"	10	6	S.Q.	Olive oil

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT +	MOUSE STRAIN	NO. OF ANIMALS	DOSE mg./inj.	ROUTE OF ADMINIS-TRATION	VEHICLE
752	p-Methoxyphenacylpyrazinium bromide	m.217	P1534	8 injs. post-tumoral (1-9 inc.)	DBA	15	1.66	I.P.	Water
753	N-Methyl-N-p-iodophenacyltetrahydroquinolinium bromide	m.176 dec.	"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	2.4	S.Q.	Olive oil
			"	8 injs. post-tumoral (1-9 inc.)	"	15	2	I.P.	Water
754	1-Methyl-1-phenacylmorpholinium bromide	m.205-206 dec.	"	3 injs. post-tumoral (5,7,10)	"	10	5.6	S.Q.	Olive oil
755	β-Naphthacylamine hydrobromide	m.214	"	3 injs. post-tumoral (5,7,10)	"	10	6	"	"
756	β-Naphthacylamine hydrochloride	m.238	"	9 injs. post-tumoral (2-10 inc.)	"	15	1	I.P.	Water
757	β-Naphthacyl, β, β'-dihydroxy-diethylsulfonium bromide	m.120	"	9 injs. post-tumoral (2-10 inc.)	"	11	1.25	"	"
758	α-Naphthacylhexamethylene-tetraminium bromide	m.135-136	"	3 injs. pre-(-3,-2,-1) and 2 post-tumoral (6,8)	"	10	6	S.Q.	Olive oil
			"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	6	"	"
			S180	3 injs. post-tumoral (5,7,10)	Swiss Albino	10	3	"	"
			P1534	9 injs. post-tumoral (2-10 inc.)	DBA	15	1	I.P.	Water
759	β-Naphthacylhexamethylene-tetraminium bromide	m.153	"	3 injs. pre-(-3,-2,-1) and 2 post-tumoral (6,8)	"	15	6	S.Q.	Olive oil
			"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	6	"	"
			S180	3 injs. post-tumoral (5,7,10)	Swiss Albino	10	3	"	"
			P1534	3 injs. post-tumoral (5,7,10)	DBA	10	6	"	"
			"	9 injs. post-tumoral (2-10 inc.)	"	15	1	I.P.	Water

ENTRY NO.	COMPOUND NAME	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT+	MOUSE STRAIN	NO. OF ANIMALS	DOSE mg./inj.	ROUTE OF ADMINISTRATION	VEHICLE
760	β-Phenylethylpyrazinium iodide	m.182	P1534	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	DBA	15	2.4	S.Q.	Olive oil
			"	8 injs. post-tumoral (1-9 inc.)	"	15	1.25	I.P.	Water
761	p-Phenylphenacylhexamethylene-tetraminium bromide	m.153.5	"	3 injs. pre-(-3,-2,-1) and 2 post-tumoral (6,8)	"	10	3	S.Q.	Olive oil
			"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	6	"	"
			S180	3 injs. post-tumoral (5,7,10)	Swiss Albino	10	3	"	"
762	1-Phenyl-2-(4-morpholinyl)-ethanol	m.81	P1534	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	DBA	15	2.4	"	"
763	1-Phenyl-2-(1-pyrrolidinyl)-ethanol	m.58.5-59.5	"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	2.4	"	"
764	1-Phenyl-2-(2-quinolyl)-ethanol	m.131	"	2 injs. pre-(-2,-1) and 1 post-tumoral (4)	"	15	2.4	"	"
765	Salt of pyrazine with (1-bromoethyl) β-naphthylketone	m.205	"	3 injs. post-tumoral (5,7,10)	"	10	5	"	"

+ Numbers designate days on which injections were given with reference to day 0, when tumor was transplanted.

MOUSE SARCOMA 180 INHIBITION TESTS

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The tests for the inhibition of sarcoma 180 in mice were conducted and the results graded according to the procedures at the Sloan-Kettering Institute with the following modifications: test materials were injected once daily for seven days before evaluation and then continued for the second week.

The preparations reported herein represent aqueous extracts of residues after complete removal of alkaloid fractions from the plant materials. They were obtained through the courtesy of Mr. G. P. Nunziata, Meer Corporation, 318 West Forty-sixth Street, New York, New York.

ENTRY NO.	PLANT MATERIAL	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls	NO. OF TREATMENTS (1x daily)	VEHICLE
766	Balm of Gilead buds	1/5	200	-3.5 / -3.8	13	Water
767	Black haw (root and bark)	1/5	200	-3.5 / -1.0	7	"
768	Blood root, N. F.	3/15	200	-5.1 / -3.8	13	"
769	Burdock	0/10	200	-2.6 / -1.5	7	"
770	Brown henna	2/5	200	-3.1 / -1.0	7	"
771	Chickweed	2/5	200	-3.5 / -1.0	7	"
772	Colombo root	1/5	200	-4.9 / -3.8	13	"
773	Elecapane	3/10	200	-4.6 / -2.5	13	"
774	Euphrobia Piluliferia	2/5	100	-3.3 / -1.0	7	"
775	Gentian root	1/10	125	-2.6 / -0.6	7	"
776	Golden seal root N. F.	0/10	200	-2.0 / -0.3	7	"
777	Gum Labdonum	1/5	0.8	-4.9 / -3.8	13	Propylene glycol
778	Horse nettle root	0/5	200	-5.1 / -3.8	13	Water
779	Kola nut	2/5	200	-3.5 / -3.8	13	"
780	Lithosperum (Gromwell)	1/10	200	-0.1 / +1.7	7	"
781	Melissa herb	1/5	200	-2.5 / -3.8	13	"
782	Poke root	0/5	200	-5.4 / -5.6	13	"
783	Primrose	1/5	200	-3.5 / -1.0	7	"
784	Sage brush root	0/5	200	-5.0 / -4.3	13	"
785	Sage brush leaves	0/5	200	-3.0 / -4.3	13	"
786	Serpentaria	3/5	200	-5.3 / -1.0	7	"
787	Smartweed	4/10	200	-6.1 / -3.6	13	"

ENTRY NO.	PLANT MATERIAL	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls	NO. OF TREATMENTS (1 x daily)	VEHICLE
788	Smilex Honduras	1/5	200	-4.3 / -1.1	7	Water
789	Snake root	0/5	200	-2.0 / +0.9	7	"
790	Southern wood	2/5	125	-2.0 / -0.9	7	"
791	Tumeric	0/10	200	-2.7 / -1.5	7	"
792	Yellow dock seed	0/5	125	-2.2 / -0.9	7	"
793	Yerba Santa	0/5	200	-3.8 / -1.0	7	"
794	Worm seed	0/5	100	-2.8 / +0.8	7	"
795	Wormwood leaves	0/5	200	-4.2 / -5.6	13	"
796	Wormwood herb	0/5	200	-5.9 / -5.6	13	"

Host Species - Swiss A mice.

TESTS OF COMPOUNDS AGAINST MOUSE LEUKEMIA AND SEVERAL SOLID TUMORS

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Mouse leukemias

The procedures employed for screening candidate compounds against transplantable leukemias are not original. Highly inbred strains of mice are inoculated intraperitoneally with a suspension of leukemic cells, placed in a large cage for randomization, and then broken into groups of ten each for experimental treatment. Generally, treatment was begun at 24 hours after leukemic inoculation and continued on an alternate day basis for 10 injections or until death. For initial screening the maximum tolerated dosage was employed. The life-span of treated versus untreated controls was compared and an effective anti-leukemic agent was always included in each experiment as an internal "treated control".

Individual animal weights were recorded at weekly intervals. Significance of results was judged on the basis of the spread and average life span of the various groups. Simple calculations of the standard deviations in life span (days) obtained with each group were calculated. A-methopterin was the control anti-leukemic agent used with Ak-4 leukemia in AKR mice and L1210 leukemia in dba mice. This agent provides for an increase in life span of mice with Ak-4 leukemia by about 100-200 per cent and for L1210 leukemia about 50-100 per cent.

Solid Tumors

Solid tumors are implanted subcutaneously by the trocar method. Treatment at the maximum tolerated dose was initiated at 24 hours after implantation and continued on an alternate day basis. Experiments with adenocarcinoma 755 or Eo771 were usually terminated at 12 days; with Sarcoma 180 experiments were terminated at 7 days. Animal weights were recorded at weekly intervals or at termination of an experiment. A "treated control" is employed in most screening experiments. 8-Azaguanine will inhibit the growth of adenocarcinoma 755 or Eo771 to about 25 per cent of the untreated controls.

Compounds which did not reduce average (10 mice) tumor weights to 60 per cent of the controls were considered negative. Compounds which reduced average tumor weights to 25-60 per cent of controls are given the rating $\pm$ and are retested. Compounds which repeatedly reduce tumor weights to 5-25 per cent of controls are considered as active.

Experiments in which mice lose an average of as much as two grams each are considered questionable because of the well-known effect of caloric restriction on tumor growth.

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	LEUKEMIA	MOUSE STRAIN	AV. LIFE (days) treated/ controls	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT.$^{\Delta}$ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
797	Adenine		Ak-4	AKR	7.9/8.4	10/10	150	-3.1 / -1.8	10	Gum acacia
798	6-Aminobenzimidazole dihydrochloride		Ak-4	"	9.6/9.0	10/10	125		10	Saline
799	2-Aminoethyl sulfuric acid		"	"	10.0/11.6	10/10	500	-6.4 / -0.1	10	Gum acacia
800	2-Amino-4-hydroxy-6,7-di (3,4-methylene dioxyphenyl) - pteridine	SRI	"	"	8.5/9.0	10/10	1000	-4.2 / -0.5	10	"
801	p-Aminosalicylic acid		1394	"	30.8/30.1	8/10	4.5	+2.1 / +0.2	10	"
802	5-Aminouracil		Ak-4	"	7.4/8.4	10/10	62.5		10	"
803	Ascorbic acid		"	"	7.8/8.4	10/10	40	-0.7 / -1.8	10	Saline
			"	"	9.6/8.4	10/10	37.1	-0.6 / -1.8	10	"
804	5-Bromouracil		"	"	7.8/8.4	10/10	62.5	+0.5 / -3.0	10	Gum acacia
805	Carbamyl-L(+)-glutamic acid	SRI	"	"	8.4/8.4	10/10	500	+1.0 / -2.3	10	"
806	N-Carbethoxyanthranilic acid		"	"	11.6/13.1	9/10	60	+0.2 / +1.0	7	"
807	6-Chloro-1-(3-bromo-2-hydroxypropyl)quinolinium bromide	Bahner	"	"	8.4/8.4	5/5	31.3		10	"
808	6-Chloro-1-decylquinolinium iodide	"	"	"	8.1/8.4	7/7	7.8	-4.0 / -3.0	10	"
809	p-Chlorophenacylamine hydrochloride	"	"	"	7.9/8.4	9/10	62.5	-2.2 / -3.0	10	"
810	p-Chlorophenacylhexamethylenetetraminium bromide	"	"	"	9.0/8.4	9/10	125	+2.7 / -3.0	10	"
811	2-Chloro-1-phenacylpyridinium bromide	"	"	"	8.2/8.4	10/10	6.3	-4.0 / -3.0	10	"

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	LEUKEMIA	MOUSE STRAIN	AV. LIFE (days) treated/ controls	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT.$^{\Delta}$ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
812	6-Chloro-1-phenacylquinolinium bromide	Bahner	Ak-4	AKR	8.6/8.4	9/9	15.63	-3.3 -3.0	10	Gum acacia
813	6-Chloroquinoxaline methiodide	"	"	"	8.0/8.4	10/10	7.8		10	"
814	Choline chloride		"	"	10.0/9.0	10/10	125	-2.6 -0.5	10	Saline
815	N-{4-[{(2,4-Diamino-6-pteridyl)-amino}-phenyl-acetyl]-L(+)-glutamic acid (Homoaminopterin)	SRI	"	"	8.2/8.4	10/10	50	____ -2.3	10	Gum acacia
816	N-{4-[{(2,4-Diamino-6-pteridyl)-methyl]-amino}-benzenesulfonyl]-L(+)-glutamic acid, (S-aminopterin)	"	"	"	11.8/11.0	10/10	25.6	-1.4 +2.1	10	"
817	N-{3-[{(2,4-Diamino-6-pteridyl)-methyl]-amino}-benzoyl]-L(+)-glutamic acid, (m-Aminopterin)	"	"	"	11.3/11.0	9/9	0.234	-0.4 +2.1	10	"
			"	"	11.2/11.0	17/17	20	-2.2 +2.1	10	"
	" (Na salt)	"	"	"	7.1/9.0	10/10	75	no data	10	"
			"	"	7.6/9.0	10/10	50	no data	10	"
818	3,4-Dichlorophenacylamine hydrochloride	Bahner	"	"	8.5/8.4	10/10	25	-1.5 -3.0	10	"
819	3,5-Diiodo-4-amino-benzoic acid	SRI	"	"	7.4/7.3	10/10	50		10	5% $NaHCO_3$
820	3,4-Dimethoxybenzalacetophenone		"	"	9.6/9.7	10/10	1000	-2.1 -2.8	10	Gum acacia
821	Ethanolamine		"	"	7.7/7.1	10/10	7.8		10	Propylene glycol
822	DL-Ethionine		"	"	7.9/8.4	9/9	125	+1.0 -3.0	10	Gum acacia
823	O-Ethyl-N-(3-chlorophenyl) carbamate	SRI	"	"	7.7/7.1	10/10	62.5		10	Propylene glycol
824	2-(p-Fluorophenacyl)-3-methylisoquinolinium bromide	Bahner	"	"	8.7/8.4	10/10	50	-1.0 -3.0	10	Gum acacia
825	Guanidoacetic acid		"	"	7.5/7.1	10/10	500		10	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	LEUKEMIA	MOUSE STRAIN	AV. LIFE (days) treated/ controls	NO. OF DEATHS/ NO. OF TEST ANIMALS	DOSE (mg/kg)	WT.Δ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
826	Growth hormone	Armour	Ak-4	AKR	7.8/8.1	10/10	5 u/mouse/ day	-2.5 / -1.5	10	Saline
			"	"	9.7/+9.0	10/10	5 u/mouse/ day	+0.9 / -1.3	10	"
827	3'-Iodofolic acid	SRI	"	"	9.3/8.7	10/10	30	-1.3 / 0.0	10	Gum acacia
828	Isonicotinic acid hydrazide		"	"	11.5/10.6	10/10	125	-0.9 / -0.6	10	"
829	O-Isopropyl-N-(3-chlorophenyl) carbamate	SRI	"	"	8.0/7.1	10/10	31.3	-4.0 / -4.5	10	Propylene glycol
830	O-Isopropyl-N-phenylcarbamate	"	"	"	7.8/7.1	10/10	125	+0.5 / 4.5	10	Gum acacia
831	O-Isopropyl-N-phenylthiocarbamate	"	"	"	7.4/7.1	10/10	62.5		10	"
832	Lindane		"	"	7.5/8.1	10/10	31.25	0.0 / -2.5	10	"
833	7-Methyl folic acid	Lederle	1394	"	21.6/21.9	9/10	100	+2.7 / +2.1	10	Saline
834	β-Naphthacylamine hydrochloride	Bahner	Ak-4	"	8.6/8.4	9/9	62.5	-1.5 / -3.0	10	Gum acacia
835	β-Naphthacylhexamethylene tetraminium bromide	"	"	"	8.2/8.4	10/10	62.5	-2.0 / -3.0	10	"
836	5-Nitrouracil		"	"	8.1/8.4	10/10	62.5	-2.5 / -3.0	10	"
837	NH_4Cl, 2-Octadecylcarbamyloxyethyl-tri-2-hydroxyethyl-		"	"	10.1/9.7	10/10	7.8	-2.8 / -2.8	10	Propylene glycol
838	α-Phenyl-γ-(p-methoxyphenyl) propylamine hydrochloride	SRI	"	"	9.5/9.7	10/10	49	-3.3 / -2.8	10	Gum acacia
839	O-Propyl-N-(3-chlorophenyl) carbamate	"	"	"	7.3/7.1	10/10	62.5		10	Propylene glycol
840	α-Pyridyl urethan	"	"	"	9.3/9.0	9/10	44	-2.0 / -0.5	10	Gum acacia

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	LEUKEMIA	MOUSE STRAIN	AV. LIFE (days) treated/ controls	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT.$^{\Delta}$ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
841	Riboflavin		Ak-4	AKR	9.1/8.4	10/10	1.86	-3.0 / -1.8	10	Saline
842	Ricin		"	"	6.0/8.1	8/8	0.006	___ / -2.5	10	"
843	Sulfanilamide		1394	"	57.9/45.0	5/10	1000	+2.35 / +3.45	10	Gum acacia
844	Thiamine		Ak-4	"	10.3/8.4	10/10	5	-2.0 / -1.8	10	Saline
845	2-Thiazolyl urethan	SRI	1394	"	35.8/24.6	10/10	20	+0.65 / -0.75	10	Gum acacia
846	Uric acid		Ak-4	"	9.2/9.0	10/10	500	-3.2 / -0.5	10	"
847	Vitamin K_1		1394	"	23.5/23.2	8/10	10	+2.94 / +4.5	10	Peanut oil

SRI = Southern Research Institute Bahner = Dr. Carl T. Bahner, Carson-Newman College

All injections were made intraperitoneally.

1394 = a chloroleukemia

Δ = Weight Change

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	MOUSE STRAIN	TUMOR AGE POST TRANSPLANT (days)	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT.$^{\Delta}$ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
848	4-Acetamidobenzaldehyde-4'-isobutyl thiosemicarbazone			L1210S	DBA	7	2/10	83	+1.8 / +3.6	4	Gum acacia
				S180	CFW	8	0/10	41.7	+0.6 / +0.7	13	"
849	p-Acetamidobenzaldehyde thiosemicarbazone	Squibb		S180	CFW	8	0/10	4.5	+0.8 / +0.7	13	"
850	p-Aminobenzaldehyde thiosemicarbazone	"	m.193-194 dec.	S180	CFW	8	2/10	35.5	+1.9 / +0.7	13	"
				Eo771	C57bl	12	1/10	30	+3.7 / +4.1	6	"
				755	"	12	0/10	40	+3.7 / +6.6	6	"
				"	"	12	0/10	35	+6.0 / +6.6	6	"
				"	"	12	0/10	50	+2.4 / +2.4	6	"
				"	"	12	0/10	60	+2.1 / +2.4	6	"
				"	"	12	1/10	70	+1.9 / +2.4	6	"
851	2-Aminobenzothiazole	Goodrich		755	"	13	1/10	125	+3.0 / +4.5	6	"
852	2-Amino-4-hydroxy-6,7-diphenylpteridine	SRI	R_f 0.86	"	"	13	0/10	166	+2.8 / +4.5	6	"
853	Aminouracil	Dougherty		Eo771	"	12	0/10	25	+2.7 / +4.1	6	"
854	Bacitracin	Pfizer		755	"	10	0/10	80	+3.6 / +5.6	5	H_2O
				"	"	10	0/10	60	+4.1 / +5.6	5	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	MOUSE STRAIN	TUMOR AGE POST TRANSPLANT (days)	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT Δ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
855	Benzalacetophenone	Distillation Products	m.55-57	755	C57bl	13	0/10	175	+3.8 / +4.5	6	Gum acacia
856	Bromouracil	Dougherty		"	"	12	0/10	25	+5.5 / +3.6	6	"
				"	"	12	0/10	50	+0.5 / +2.4	6	"
				"	"	12	2/10	75	-0.9 / +2.4	6	"
857	N-n-Butylcyanoacetamide	SRI	m.71-72	"	"	13	0/10	66	+3.4 / +4.5	6	H_2O
858	(-)2-(5-Carboxypentyl)-4-thiazolidone Antibiotic No. 95	Pfizer	m.54	Eo771	"	12	0/10	100	+3.5 / +5.5	6	"
859	Cyanoacetamide	SRI	m.119-120	755	"	13	0/10	166	+3.9 / +4.1	6	Gum acacia
860	dl-Desthiobiotin			S180	CFW	7	0/5	20/1/cc	+1.5 / -0.7	12	Saline
861	2,4-Diamino-6,7-dimethylpteridine	SRI	R_f 0.88	755	C57bl	13	0/10	83	+1.3 / +4.5	6	Gum acacia
862	2,4-Diamino-6,7-diphenylpteridine	SRI	R_f 0.88	"	"	13	0/10	166	+3.9 / +4.5	6	"
863	2,6-Diaminopurine	Dougherty		"	"	11	1/10	75	+1.8 / +2.2	6	"
864	5-(2,4-Dichlorophenoxy)-2-thiouracil	Wellcome		"	"	10	0/10	300	+2.0 / +3.1	6	"
				"	"	10	0/10	250	+2.0 / +3.1	6	"
865	Epichlorohydrin	Distillation Products	b.114-116	Eo771	"	12	0/10	100	+4.4 / +5.5	6	"
				755	"	12	0/10	125	+0.9 / +2.5	6	"

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	MOUSE STRAIN	TUMOR AGE POST TRANSPLANT (days)	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT.Δ AT ONE WEEK treated/ controls	NO. OF TREATMENT	VEHICLE
866	DL-Ethionine	Mann Fine Chemicals		755	C57bl	12	0/10	75	+1.9 / +2.4	6	Gum acacia
				"	"	12	1/10	100	+0.3 / +2.4	6	"
867	p-Ethylsulfonylbenzaldehyde	Squibb	m. 230-232 dec.	Eo771	"	12	0/10	75	+0.9 / +3.3	6	"
868	p-Ethylsulfonyl benzaldehyde thiosemicarbazone	"		L1210S	DBA	7	0/10	166	+2.6 / +2.8	4	"
				S180	CFW	8	1/10	41.7	+1.1 / +0.7	13	"
869	Formamide			"	Swiss	8	0/10	300	-2.6 / +0.7	7	Saline
870	Isonicotinic acid hydrazide	Squibb		L1210S	DBA	7	0/10	62.5	+3.4 / +2.8	4	Gum acacia
871	Malonamamidine hydrochloride	SRI	m. 175-177	755	C57bl	13	0/10	166	+3.8 / +4.1	6	"
872	2-Mercaptobenzothiazole	Goodrich		"	"	13	0/10	160	+3.4 / +4.5	6	"
873	Neomycin hydrochloride	Pfizer		"	"	10	0/10	60	+3.9 / +5.6	5	H_2O
				"	"	10	0/10	50	+4.2 / +5.6	5	"
874	Neopyrithiamine	Merck		"	"	12	0/10	62	+3.7 / +3.7	6	"
				"	"	12	0/10	50	+3.1 / +3.7	6	"
875	m-Nitrobenzalacetophenone	Distillation Products	m. 143-144	"	"	13	0/10	175	+4.1 / +4.5	6	Gum acacia
876	Nitrouracil			Eo771	"	12	0/10	100	+3.0 / +3.3	6	"
877	Oximinocyanoacetamide	SRI	m. 180-182	755	"	13	0/10	100	+4.5 / +4.1	6	H_2O

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT OF SAMPLE USED	TUMOR	MOUSE STRAIN	TUMOR AGE POST TRANSPLANT (days)	NO. OF DEATHS/ NO. OF ANIMALS	DOSE (mg/kg)	WT.Δ AT ONE WEEK treated/ controls	NO. OF TREATMENTS	VEHICLE
878	Phenylazomalonamamidine	SRI	m. 200-201	755	C57bl	13	0/10	166	+2.5 / +4.1	6	Gum acacia
879	Polymyxin B sulfate	Pfizer		"	"	10	0/10	15	+1.3 / +2.7	5	H_2O
				"	"	10	0/10	10	+1.6 / +2.7	5	"
				"	"	12	1/10	20	-1.5 / +2.4	6	"
880	β-Propiolactone	Matheson	b. 162-165	"	"	12	0/9	100	+2.0 / +5.5	6	Gum acacia
881	p-n-Propoxybenzaldehyde thiosemicarbazone	Squibb	m. 146-147.5	Eo771	"	12	0/10	75	+1.9 / +3.3	6	"
882	Rimocidin	Pfizer		755	"	10	0/10	4	+1.0 / +1.2	5	H_2O
				"	"	10	0/10	3	+1.4 / +1.2	5	"
883	Sodium dithioformate	Bahner		"	"	10	0/10	62	+4.0 / +5.6	5	"
				"	"	10	0/10	40	+4.2 / +5.6	5	"
884	Streptomycin sulfate	Pfizer		"	"	10	0/10	250	+1.7 / +2.1	5	"
				"	"	10	0/10	200	+2.4 / +2.1	5	"
885	5-Thiol-7-amino-1H-v-triazolo-(d)-pyrimidine hydrochloride	Bahner		L1210S	DBA	7	0/10	80	+3.6 / +2.8	4	Gum acacia
886	Thiolutine	Pfizer		755	C57bl	10	0/10	2	+2.1 / +2.1	5	H_2O
				"	"	10	0/9	1.5	+2.5 / +2.5	5	"

All injections were made intraperitoneally.

Δ Weight Change

TESTS AGAINST TRANSPLANTED AND SPONTANEOUS TUMORS IN MICE

Kurt Stern
Mount Sinai Medical Research Foundation
Chicago, Illinois

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	AGE OF TUMOR OR DAYS AFTER TRANSPLANT	MOUSE STRAIN	NO. OF DEATHS/ NO. OF ANIMALS	DOSE mg/kg/day	AV. WT. CHANGE: treated/ controls	NO. OF TREATMENTS OR DURATION OF FEEDING	ROUTE OF ADMINISTRATION	VEHICLE
887	Cytosine	Bios Lab & Dougherty	sp. ma. car.	1-2 wks.	C3H	24/24	100-200	1	20-50	S.C. or I.P.	Physiol. saline
			tr. sar.	1-2 days	C57bl	20/20			15-20		
888	Daxad No. 11 (polymerized sodium salts of alkyl naphthalene sulfonic acids)	Dewey & Almy Chems.	tr. ma. car.	1-2 days	C3H	6/6	30-50		18	I.P.	"
			tr. ma. car.	1-2 days	DBA	5/5			28	"	"
889	Maleic hydrazide	Naugatuck Chemicals	tr. ma. car.	1-2 days	C3H	15/15	600-1200	1	14	"	Triethanolamine-saline suspension
			tr. ma. car.	1-2 days	DBA	15/15			50	"	
890	Polyvinylpyrrolidone (PVP)	General Aniline	tr. sar.	1 day	C57bl	6/6	700	1	20	S.C.	Physiol. saline
			Leuk. AK4	1 day	AKR	6/6		1	8	"	"
			Leuk. 3	1 day	AKR	6/6		1	12	"	"
891	Uracil	Bios Lab	sp. ma. car.	1-2 wks.	C3H	24/24	400	1	20-50	"	"
			tr. sar.	1-2 days	C57bl	20/20			15-20	"	"

STUDIES WITH VARIOUS EXPERIMENTAL TUMORS

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The test animals were inbred strains of mice, each of which bore at least one spontaneous or subcutaneously transplanted malignant tumor. A preliminary study of the nature of each material to be tested was made and one or more preliminary experiments were performed on each test material to ascertain its pharmacological and toxicological actions and to determine dosages for mice. For therapy, full tolerance doses were administered. This amount varied with differing substances because of differences in rapidity of assimilation and elimination, cumulative and other effects, but usually the mice tolerated a daily dose of 60 per cent of the mean minimal lethal dose.

The usual route of administration was by intraperitoneal injections and the frequency of the doses was daily. Variations from this procedure are recorded in the tabulation. Treatments were started when the transplanted tumors were about ten millimeters in their greatest diameters. Spontaneous cancers were used in differing sizes.

Weekly measurements, in millimeters, of the greatest diameters of the tumors of the mice undergoing treatment, together with a rough outline drawing of each tumor, were recorded and this gave a visual record of the successive sizes of every tumor. Mice in which the tumors had regressed were kept for the remainders of their lifetimes to ascertain whether the tumors recurred.

Necropsies were performed and recorded on all experimental mice. Pathological specimens were examined on tumors and other tissues in instances in which it was felt that a deleterious action had been effected on the tumors.

Untreated controls of transplanted tumors were set up for groups of substances, but, if a test showed suspected tumor damaging effects, repeat tests were performed and in the final tests an untreated control mouse was set up for every test mouse. Treated controls were used for vehicles, diluents and in which more than one substance was tested.

An experiment, to be positive, must yield total and permanent disappearance of all of the tumors leaving a fairly healthy test animal. So far, there have been no positive tests.

Some of our earlier data have been included in the publication of Dr. Dyer. Other data not selected for the present publication of negative data are available in pamphlet form. For the present publication there have been included only those compounds which permit the tumors to grow to more than 50 per cent of the diameters of the controls. Mixtures and poorly defined preparations have not been included but may be found in the pamphlets from the author.

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
892	Acetaldehyde	Eastman	MCA sar.	DBA	10	1.1	Aqueous	314	31/29	11/16
893	Acetylacetone	"	"	"	10	5	"	351	35/37	13/16
894	3-Acetylpyridine	Farchan Lab	sp.	SWR	10	0.55	"	1010	101/77	13/13
895	Acetyl sulfanilamide with acetylamino-benzoyl chloride	Felton	Glioma	C3H	10	15	"	1083	108/137	33.7/37.1
896	Acrolein	Eastman	HP mel.	C	10	0.05	"	626	63/37	15/14
897	Adenosine-3-phosphoric acid	Gen. Bio.	MCA sar.	DBA	10	2.0	Aqueous suspension	400	40/43	15/15
898	Adipamide	Felton	sp.	Swiss	8	10	"	423	52.9/60.2	16.7/17.3
899	Allantoin	Gen. Bio.	MCA sar.	DBA	10	10	1% Aqueous acacia	295	29/29	13/16
900	Aluminum ethoxide (Pellets implanted subcutaneously) [1]	Eastman	HP mel.	C	10	25	Cocoa butter	20	48/53	25/18
901	p-Aminoacetphenone-(p-aminophenylmethyl ketone)	"	MCA sar.	DBA	10	10	Dispersion	268	27/29	14/16
902	p-Aminobenzenesulfonyl chloride with adipamide	Felton	sp.	C3H	8	10	Aqueous suspension	452	56.5/52.6	11.4/13.7
903	p-Aminobenzenesulfonyl chloride with alloxan	"	S180	"	11	12.5	Aqueous	291	26.4/52.6	22.1/15.7
			sp.	"	8	12.5	"	469	58.6/56.2	19.9/13.7
904	p-Aminobenzenesulfonyl chloride with 1-benzothiazolyl hydrazine	"	sp.	"	8	2.5	"	326	40.7/56.2	12.1/13.7
905	p-Aminobenzenesulfonyl chloride with carbazole	"	sp.	"	10	20	"	304	43.1/56.2	12.7/13.4
906	p-Aminobenzenesulfonyl chloride with cetyl alcohol	"	S180	"	11	12.5	"	314	28.5/52.6	17.1/17.3
			sp.	Swiss	7	12.5	"	286	40.9/60.2	9.0/13.7
907	p-Aminobenzenesulfonyl chloride with coumarin	"	sp.	"	7	5	Emulsion	317	45.3/60.2	12.1/17.3
908	p-Aminobenzenesulfonyl chloride with ethyl formate	"	S180	C3H	11	12.5	Aqueous	461	41.9/52.6	10.3/15.7
			sp.	"	7	12.5	"	440	61.9/56.2	12/13.7

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSES mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
909	p-Aminobenzenesulfonyl chloride with phosphoric acid	Felton	sp.	Swiss	7	12.5	Aqueous	440	62.8/60.2	11.1/17.3
910	p-Aminobenzenesulfonyl chloride with pyrrole	"	S180	C3H	10	5	Aqueous suspension	288	28.8/52.6	12.7/15.7
			sp.	"	7	5	"	342	48.8/56.2	18.0/13.7
911	p-Aminodimethyl aniline oxalate	Eastman	HP mel.	C	10	0.4	Aqueous	376	38/37	12.6/14
912	1-Amino-2-naphthol-4-sulfonic acid	Felton	sp.	Swiss	8	5	"	362	45.2/60.2	10.7/17.3
913	p-Aminosalicylic acid	Gen. Bio.	MCA sar.	DBA	10	3.75	"	240	24/38	10/10
914	Ammonium tetrathiocyanodiamonochromate	Eastman	"	"	10	1.25	"	278	28/29	15/16
915	Amylum	U.S.P.	"	"	10	7.5	"	299	30/36	16.7/16.4
916	Benzophenone	Eastman	sp.	Swiss	8	10	Emulsion	362	45.2/60.2	11.1/17.3
917	Benzyl chloride		sp.	SWR	10	0.37	Aqueous	463	46/33	8/10
918	Benzyl isothiourea . HCl	Eastman	sp.	"	10	20	"	341	67/54	8/12
919	α-Benzyl-α-phenyl hydrazine . HCl	"	HP mel.	C	11	1.9	"	326	33/36	18/16
920	Bromal	"	sp.	C3H	10	0.03	"	407	40.7/43.2	12.4/14.3
921	Bis(Brommethoxybenzyl) sulfone	Felton II	HP mel.	C	10	5	Emulsion	619	62/37	15/14
922	Brucine sulfate	Eastman	sp.	SWR	10	1	Aqueous	552	55/57	12/12
923	Cadaverine	Gen. Bio.	MCA sar.	DBA	10	0.5	"			
924	Calcium glycerate	"	HP mel.	C	10	5	Aqueous suspension	554	55/60	25/15
925	Carboxymethyl cellulose (treated control)	Stuart Co.	"	C	10	0.62	Aqueous	494	49/53	16/18
926	Chloroacetdiethylamide	Eastman	MCA sar.	DBA	10	0.75	"	296	30/33	11.7/14
927	o-Chlorobenzylnicotinium thiocyanate	Dept. of Agric.	HP mel.	C	10	0.035	"	807	92.5/37	11.8/14
928	3-Chloro-7-methoxy-9-[(β-diethylaminoethylthio) propylamino] acridine . 2HCl with glycerol	Sterling Win. and Baker	MCA sar.	DBA	10	0.2 50	"	364	36/37	11/12
929	Cholic acid (3,7,12-trihydroxycholanic acid)	Gen. Bio.	"	"	17	1	CMC	383	39/38	10/10

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
930	Choline chloride	Gen. Bio.	sp.	SWR	10	1.56	Aqueous	728	73/65	10/12
931	Citramide	Felton	sp.	C3H	10	10	"	420	60/56.2	14/13.7
932	Citric acid	Ansco Corp.	Adeno-carcinoma	DBA	4	2	"	230	89/54	34/28
933	Colchicine and hydrogen peroxide	Hartwell and Baker	MCA sar.	"	10	0.001 4.3	"	511	52/54	11/10
934	Cupferron (Ammonium nitrosophenylhydroxylamine)	Smith	HP mel.	C	10	0.5	"	586	59/58	25/27.2
935	Cyanogen bromide	Eastman	MCA sar.	DBA	10	0.04	"	138	14/37	2.9/19
936	n-Cyclohexyl-β-alanine	Goodrich	HP mel.	C	10	10	"	491	49/58	18.2/27
937	Diacetyl monoxime	Eastman	S180	C3H	16	5	"	179	57/61	18/17.1
938	Dibenzyl ether of hydroquinone [2]	Goodrich	HP mel.	C	10	sat.	Propylene glycol	341	35/38	25/26
939	p-Diethylamino benzaldehyde	Eastman	"	C	10	1.87	10%alcohol	287	29/37	11/17
940	N, N'-Dihydroxyethyl-β-alanine	Goodrich	MCA sar.	DBA	10	10	Aqueous (hot)	293	29/29	10.1/16
941	Diisobutylene [3]	Eastman	sp.	SWR	10	50	Mineral oil	89	62/58	8/12
942	p-Dimethylamino benzaldehyde	"	HP mel.	C	10	2	Emulsion	412	41/53	14/14
943	3,6-Dimethylamino thioxanthen-S-dioxide and bis(di-bromhydroxybenzyl) sulfide	Felton II	"	C	10	1	"	403	41/58	12/27
944	Dimethyl-n-propylcarbinol	Eastman	"	C	10	1	Aqueous	524	52.4/58.3	16.4/27.2
945	N, N-Dimethyl-N'-(2-pyridyl)-N'-(3-thenyl) ethylene diamine . HCl	Winthrop-Stearns	MCA sar.	DBA	10	0.2	"	236	24/40	9/14
946	Di p-nitrobenzylnicotinium bromide	Dept. of agric.	"	"	10	0.1	"	254	25/29	10/16
947	4,4-Diphenyl semicarbazide	Eastman	sp.	SWR	10	0.8	"	692	69/54	9/12
948	Diphenylthiocarbazone [4]	"	MCA sar.	DBA	5	0.37	Alkaline aqueous	201	45/37	15/18
949	Di-n-propyl ketone	"	"	"	10	1	Aqueous	392	39.2/37.4	11.9/18.7

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
950	Ethanolamine	Eastman	MCA sar.	DBA	10	1.25	Aqueous	327	33/38	11/11
951	N-Ethyl-phenyl-alanine	Greenberg and Gal	HP mel.	C	10	2.3	Emulsion	160	67/58	24/27
952	N-Ethyl-aminobutyric acid	"	"	C	10	2	Aqueous	370	71/58	28/27
953	Ethylenediamine	Eastman	"	C	10	0.5	"	337	33.7/35.6	13.3/15.4
954	Ethylisothiocyanate		sp.	SWR	10	0.38	Emulsion	606	61/65	12/12
955	N-Ethyl leucine	Greenberg and Gal	HP mel.	C	10	1.56	Dispersion	705	70.5/58	16/27
956	N-Ethyl norvaline	"	MCA sar.	DBA	10	2	Aqueous	321	32/37	11/18
957	N-Ethyl valine	"	HP mel.	C	10	7.8	Emulsion	330	72/58	26/27
958	Fluorobenzene	Eastman	"	C	10	0.54	Aqueous	277	27.7/35.6	13.1/16.2
959	Furacin (5-nitro-2-furaldehyde semicarbazone)	Eaton Labs	"	C	10	4.1	Homogenate	628	63/58	19.2/27
960	Furan	Eastman	MCA sar.	DBA	10	1.7	Colloid dispersion	314	31/35	9.4/9.2
961	Glutaric acid (Pentadecanoic acid)	Gen. Bio.	"	"	10	1.37	Aqueous	368	37/37	13/18
962	Glutathione	"	HP mel.	C	10	1	"	320	36/60	16/15
963	Heparin, sodium	"	MCA sar.	DBA	10	1	"	248	25/38	11/11
964	n-Heptaldehyde	Eastman	"	"	10	9	Emulsion	128	13/33	12.8/14
965	Hexachloroethane	"	sp.	SWR	10	1.87	10%alcohol	485	48/38	7/12
966	Hexamethylenetetramine	"	sp.	"	10	10	Aqueous	666	67/53	7.3/9
967	Hippuric acid	"	MCA sar.	DBA	10	3.75	Emulsion	243	24/29	7/16
968	Histamine diphosphate	Gen. Bio.	"	"	10	1	Aqueous	455	45/38	16/19
969	Hydrogen peroxide	Baker	sp.	SWR	10	5 of 30%	"	477	48/54	8/10
970	Iodotetrazole	Lab. Exper. Onc.	HP mel.	C	10	2	"	368	37/37	16/14

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
971	N-Isopropyl-phenylalanine	Greenberg and Gal	MCA sar.	DBA	10	2	Dispersion	136	14/29	12/16
972	α-Ketoglutaric acid	Gen. Bio.	sp.	SWR	10	1.56	Aqueous dest.	667	67/65	14/12
973	N-Phenyl leucine	Greenberg and Gal	HP mel.	C	10	3	Emulsion	641	64/37	18/14
974	Magnesium perchlorate and p-aminophenyl mercuric acetate	Eastman	MCA sar.	DBA	10	1 0.014	Aqueous	305	30/32	13/14
975	Maleic hydrazide	Naugatuck	"	"	10	5	"	330	33/29	13.4/16
976	N-Methyl-N'-(4-chlorobenzhydryal) piperazine . HCl	Wellcome	sp.	SWR	10	0.38	"	520	52/54	10/10
977	Methy-bis-(chloroethyl) amine . HCl	Delta chem.	MCA sar.	DBA	10	0.078	"	270	27/33	10/14
978	Methylergonovine tartrate	Sandoz Chem.	sp.	C3H	11	0.02	"	701	74/77	14/13
979	Methylmercaptan	Eastman	MCA sar.	DBA	10	0.9	"	319	31.9/37	13/17
980	Mono-n-butylether of hydroquinone [2]	Goodrich	HP mel.	C	10	sat.	Propylene glycol	526	38.5/38	15/24.2
981	Mono and diheptyl-diphenylamines [1]	"	S91 mel.	DBA	4	0.1	Mineral oil	16	26/21	14/9.6
			sp.	SWR	4	10	"	80	167/54	19/12
982	Monomethyl ether of hydroquinone [2]	"	HP mel.	C	10	sat.	Propylene glycol	982	49/38	24/24.2
983	α-Naphthylhydrazine . HCl	Eastman	MCA sar.	DBA	10	1.12	Aqueous	380	38/38	13/10
984	Neotetrazolium chloride	Gen. Bio.	"	"	10	0.13	"	302	30/29	13/16
985	Neotetrazolium phosphate	"	"	"	10	0.18	"	312	31/29	14/10
986	Nicotinic acid with chloroform	Felton	sp.	Swiss	8	5	Alcoholic KOH	507	63.4/60.2	16.9/17.3
987	Nitroguanidine	Eastman	sp.	SWR	10	9.2	Aqueous	733	74/54	10.8/12
988	p-Nitrophenylhydrazine	"	HP mel.	C	10	0.7	"	449	45/48	17/16
989	Nucleic acid	Gen. Bio.	"	C	10	9	1% KOH	323	32/37	15/14

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
990	Papain	Maver	sp.	SWR	10	0.5	Aqueous dest.	477	48/49	9/11
991	Pentobarbital, sodium	Boulder Creek, Calif. Pharm.	sp.	C3H	1	0.6	Aqueous	26	33/63	15/29
992	Phenylarsonic acid	Eastman	HP mel.	C	10	0.37	"	374	37/37	7/14
993	Phenylazodiaminopyridine .HCl	Merck	"	C	10	0.75	Aqueous suspension	484	48/48	19/16
994	m-Phenylenediamine	Eastman	MCA sar.	DBA	10	0.37	Aqueous	243	24/38	5/10
995	Phenolsulfonyl chloride with aminopyridine	Felton	Glioma	C3H	10	20	"	717	71.7/78.3	23/37.1
			sp.	"	7	20	"	409	58.7/56.2	20.7/13.7
996	Phthalanil	Naugatuck	MCA sar.	DBA	10	10	"	383	38/37	12/18
997	Podophyllum	Parke-Davis	HP mel.	C	4	0.16	"	210	52/37	21/14
998	Potassium hydrogen phthalate	Eastman	"	C	10	6	Emulsion	379	38/37	12.3/14
999	N-Propyl leucine	Greenberg and Gal	sp.	SWR	10	2.5	Dispersion	522	52/54	10/12
1000	Quinaldine	Eastman	MCA sar.	DBA	10	2.1	Homogenate	272	27/36	7/12
1001	Semicarbazide .HCl	"	"	"	10	2	Aqueous	247	44/37	16/18
1002	Sodium-2-naphthyl-amine-6,8-di-sulfonate (Amino G salt)	"	sp.	C3H	7	6.25	"	472	67.4/56.2	22.7/13.7
		Felton	S180	"	11	6.25	"	311	28.1/52.6	22/15.7
1003	Sodium phosphate primary	Baker	MCA sar.	DBA	10	7.5	"	402	40.2/34.9	13/9.2
1004	Sodium phosphate secondary	"	"	"	10	10	"	367	36.7/34.9	8.4/9.2
1005	Sodium phosphate tertiary	"	"	"	10	3	"	308	30.8/34.9	6.9/9.2
1006	Sodium phosphate, primary, secondary, and tertiary	"	"	"	10	3 5 1.18	"	396	39.6/34	11.9/9.2
1007	Sodium sulfanilate	Felton	S180	C3H	11	25	"	334	30.4/52.6	21/15.7
			sp.	"	7	25	"	433	61.9/56.2	21.5/13.7

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER (mm.) treated/controls
1008	Sucrose	Grocery	HP mel.	C	10	100	Aqueous	405	40/48	18/16
1009	Sulfadiazine	Felton	S180	C3H	11	25	Aqueous suspension	241	21.9/52.6	19/15.7
			sp.	"	7	25	"	221	31.6/56.2	11/13.7
1010	Sulfaguanidine	"	sp.	"	7	10	Aqueous	318	45.4/56.2	11/13.7
1011	Sulfanilamide with adipic acid chloride	"	sp.	"	7	10	"	308	44/56.2	14.7/13.7
1012	Sulfanilamide with butyric acid chloride	"	sp.	Swiss	7	10	"	492	70.3/60.2	13.1/17.3
1013	Sulfanilamide with caproic acid chloride	"	sp.	"	8	10	"	500	62.5/60.5	14.6/17.3
1014	Sulfanilamide with fumaric acid chloride	"	sp.	C3H	7	10	"	499	71.3/56.2	13.3/13.7
1015	Sulfanilamide with malic acid chloride	"	sp.	C3H	7	10	Aqueous suspension	477	68.1/56.2	24/13.7
1016	Sulfanilamide with propionic acid chloride	"	sp.	Swiss	8	10	Aqueous	840	105/60.2	18.5/17.3
1017	Sulfanilamide with succinic acid chloride	"	sp.	C3H	8	10	"	345	43.1/56.2	16.8/13.7
1018	Sulfanilamide with uric acid chloride	"	sp.	"	8	10	Aqueous suspension	319	39.9/56.2	14.6/13.7
1019	Terephthalic acid	Naval Res. Lab.	MCA sar.	DBA	10	6	Homogenate	370	37/37	12.6/18
1020	Tetramethyl ammonium iodide	Eastman	"	"	10	0.3	Aqueous	322	32.2/34.9	10.5/9.2
1021	Tetrasodium ethylenediamine tetraacetate	Lab. Exper. Onc.	"	"	16	0.04	"	290	29/37	15/18
1022	Tetrazole	"	HP mel.	C	10	0.02	"	560	56/38	21.8/26
1023	2-Thiobarbituric acid	Eastman	sp.	SWR	10	4	"	705	70/54	10.2/12
1024	Triethyleneimino-s-triazine and colchicine		sp.	SWR	10	0.008 0.001	"	786	79/58	13/13
1025	Triethyleneimino-s-triazine and pyrogallol		MCA sar.	DBA	10	0.008 1.56	"	383	38/37	14.5/12

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	TUMOR	MOUSE STRAIN	NO. TEST ANIMALS	DOSE mg/dose	VEHICLE	TOTAL DOSES	SURVIVAL AV. NO. DAYS treated/ controls	TUMOR GROWTH GREATEST DIAMETER(mm.) treated/controls
1026	Trimethylphenyl ammonium iodide		HP mel.	C	10	0.162	Aqueous	436	44/39	21/14
1027	Trisodiumnitro triacetic acid	Lab. Exper. Onc.	MCA sar.	DBA	16	0.5	"	240	24/37	14.5/18

1) Subcutaneous injection.

2) Compound both painted on tumor and injected I.P.

3) Weekly doses I.P.

4) Both fed and injected I.P.

Felton - Dr. Lloyd D. Felton, National Institutes of Health

Felton II - Dr. Lloyd Felton, Jr.

Gen. Bio. - General Biochemicals, Inc., Chagrin Falls, Ohio

Lab. Exper. Onc. - Laboratory of Experimental Oncology, San Francisco

Naugatuck - Naugatuck Chemical Division of U. S. Rubber Co.

Baker - J. T. Baker Company

Hartwell - Dr. J. Hartwell

Smith - G. F. Smith Chemical Co.

Greenberg and Gal - Drs. D. Greenberg and E. M. Gal

Maver - Dr. Mary Maver

MCA sarc. - means that the original sarcoma was induced by 20-methylcholanthrene in a DBA strain mouse.

HP mel. – means Harding-Passey melanoma.

Aqueous dest. - distilled water.

Emulsion - the stock emulsion contained mineral oil, USP, water, a psyllium seed demulcent and 1/2% phenol for preservative.

Dispersion - contained a trace of starch or mucilage.

Homogenate - ingredients mechanically suspended in water.

SARCOMA 180 INHIBITION SCREENING DATA[1]

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We have employed the following method of screening materials for ability to inhibit the growth of Sarcoma 180 in mice:

1. Weigh the mice. Swiss females, 18-22 gms., from the Blue Spruce, Carworth, Harpaul, Millerton Research, and Rockland Farms and Joseph E. Stocker have been used. They have been given Purina Laboratory Chow and water ad lib.

2. Transplant tumor pieces by trocar subcutaneously into the axillary region. The tumor fragments, approximately 1.5 mm. in any dimension, are cut from non-necrotic portions of the donor tumor and samples of each tumor cultured for detection of any possible bacterial contamination.

3. Twenty-four hours later start intraperitoneal injections of compounds in maximum tolerated doses on a repeated basis. In nearly all cases the toxicities of the compounds were determined by either of two methods[2]. The maximum tolerated doses by intraperitoneal injections repeated daily for five days have been determined or the approximate LD_{50} for a single dose has been found. Although exceptions have been encountered, in general, one-fourth to one-third the LD_{50} has been found to be a dose satisfactorily approximating the maximum tolerated on repeated injection.

4. Injections are continued twice daily for seven days. In some instances single injections have been given daily.

5. The test is repeated at the same or different level depending upon the result of the first trial. If the first dose has been too toxic, a lower dose is tried; if the first dose appears to be well tolerated, a higher one may be tried. For each compound reported herein as negative there are additional supporting data at lower and/or higher dose levels; however many of the compounds have not been tested at dose levels higher than 500 mg/K/day.

Results of testing materials have been evaluated as follows:

- No effect, when the average diameter was 3/4 or more of the average diameter of the control tumors.

± Slight inhibition, when the average diameter was 1/4 to 3/4 of the average diameter of the control tumors.

+ Marked inhibition, when the diameter was 1/4 or less of that of the control tumors; actually, the volume of such a tumor would be 1/64 or less of the control if tumors may be considered spherical.

Over 8000 compounds and nearly an equal number of materials of natural origin have been screened for ability to inhibit Sarcoma 180. Twelve compounds have met the requirements for the grading of +. They are: 2,4,6-tris-Ethylenimino-s-triazine; 4-Aminopteroyl glutamic acid; 4-Amino-N^{10}-Methyl pteroyl glutamic acid; 4-Amino pteroylaspartic acid (dl); 4-Amino-9-methyl pteroyl glutamic acid; 4-Amino-pteroyl threonine; 4-Amino-9,10-dimethyl pteroylglutamic acid; 4-Amino-pteroyl triglutamic acid; 3-bis(β-Chloroethyl) amino methyl-4-methoxy-methyl-5-hydroxy-6-methyl pyridine dihydrochloride; N, N', N''-Triethylene phosphoramide; Phosphoric acid, diethyl amide diethylenimide; N-Pentamethylene-N', N''-diethylene phosphoramide. Most of them have already been reported. Annals of the New York Academy of Sciences 52, 1360-78 (1950); Cancer Research 11, 432-36 (1951); Proc. Soc. Exp. Biol. Med. 78, 299-305 (1951); Cancer 5, 144-52 (1952).

1. The screening program for anti-tumor activity has been supported since 1947 by institutional grants from the American Cancer Society.

2. The toxicities of most of the compounds included in this report and many other compounds were obtained by support in part by a research grant (C-415) from the National Cancer Institute of the National Institutes of Health, U. S. Public Health Service. The data are on file at the Chemical-Biological Coordination Center, National Research Council, Washington 25, D. C.

Approximately 200 compounds are in the ± category. Included are urethane, HN2 and certain other nitrogen mustards, some 2,4-diaminopyrimidines and some anti-folic acids not as effective as those listed above. The rest of the ± compounds are being studied as possible leads to more effective, related compounds. All of the other compounds we have tested against Sarcoma 180 have thus far been negative but some require retesting at higher dose levels.

In the accompanying tabulated data the solvents have been coded as follows:

Solvent Coding

1. saline
2. carboxymethyl cellulose (Cellulose gum) high viscosity Type 120 Hercules Powder Co., 0.5% in saline
3. gum acacia (gum arabic) 1% or 10% in saline
4. propylene glycol
5. butyl succinate
6. peanut oil
7. mineral oil

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It is a pleasure to acknowledge the many sources of the compounds we have used. All of the cooperating laboratories have been most helpful in attempting to provide adequate supplies of compounds many of which would not otherwise have been available to us. The sources of the compounds have been designated in the tables as listed below:

A	University of Chicago Toxicity Laboratory
B	May and Baker
C	Parke, Davis and Company Compounds under entry numbers 1637, 1944, 1438, 1444, 1646 and 1897 transmitted through Parke, Davis and Company should also be attributed to the following sources, respectively: Dr. J. C. Calandra, Northwestern University; Dr. J. H. Burckhalter, University of Kansas; Dr. D. A. Shirley, Tulane University; Dr. P. A. Wells, Eastern Regional Research Laboratory; General Chemical Company and Dr. H. S. Mosher, Leland Stanford University.
D	Dr. Max Tishler, Merck and Company
D1	Dr. Karl Folkers, " "
D2	Dr. Carl Pfister " "
E	Eastman Kodak Company
F	Dr. F. E. Ray, Cancer Research Laboratory, University of Florida
G	Southern Research Institute
H	Sterling Winthrop
I	Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture
I1	Dr. Thomas D. Fontaine, U. S. Department of Agriculture
I2	Dr. C. E. Rehberg, Eastern Regional Laboratory
Ia	Dr. H. L. Haller, U. S. Department of Agriculture
J	Smith, Kline, and French
L	Monsanto Chemical Company
M	Calco Chemical Division, American Cyanamid Company
M1	Stamford Laboratories, American Cyanamid Company
M2	Dr. R. O. Roblin, American Cyanamid Company
N	Lilly Research Laboratories
N1	Dr. Ralph L. Shriner, Department of Chemistry, State University of Iowa
P	Eaton Laboratories, Inc.
Q	E. I. du Pont de Nemours and Company
S	S. B. Penick and Company
T	Dr. Alexander Haddow, The Chester Beatty Research Institute
W	Abbott Laboratories
Z	The William S. Merrell Company
AA	B. F. Goodrich Chemical Company
AC	Dr. William Robbins, New York Botanical Gardens
AE	National Research Council, Chemical-Biological Coordination Center
AG	Dr. J. H. Williams, Lederle Laboratories
AG2	Dr. Herald Cox, " "
AJ	Hoffmann-La Roche, Inc.
AM	E. R. Squibb and Sons
AN	National Aniline Division, Allied Chemical and Dye Corporation
AP	Esso Laboratories, Standard Oil Company
AQ	Endo Products, Inc.
AR	Commercial Solvents Corporation
AU	Dr. Samuel Raymond, Columbia University Medical School

AW	Sloan-Kettering Institute for Cancer Research
AW2	Dr. Kenneth Savard
AW4	Dr. George Brown
AW5	Dr. Ralph Barclay
AW6	Dr. John Davoll
AW7	Dr. Earl Balis
AZ	Dr. Kenneth M. Campbell, University of Notre Dame
BA	Dr. C. K. Cain, McNeil Laboratories
BB	Charles Pfizer and Company, Inc.
BC	Schwarz Laboratories, Inc.
BE	Wellcome Research Laboratories
BI	Dr. J. Philip Mason, Boston University
BJ	Dr. Ernest A. F. Friedheim
BL	Remington Rand, Inc.
BM	Dr. Robert C. Elderfield, Department of Chemistry, University of Michigan
BP	Sharples Chemicals, Inc.
BT	Schering Corporation
BV	Union Carbide and Carbon Corporation
BX	Bristol Laboratories
BY	Upjohn Laboratories
CA	Dr. N. H. Cromwell, Department of Chemistry, University of Nebraska
CB	Dr. Henry A. Rutter, Biochemical Research Foundation
CC	G. D, Searle and Company
CF	Dr. Ray H. Anderson, General Mills
CG	Dow Chemical Company
CI	General Aniline and Film Corporation
CJ	Dr. Frank H. Dickey, Department of Chemistry, California Institute of Technology
CO	University of Colorado
CQ	Sharp and Dohme, Inc.
CT	National Drug Company
CW	Dr. Hoke S. Green, University of Cincinnati
CX	Dr. Robert E. Lutz, Cobb Chemical Laboratory, University of Virginia
CY	Dr. Carl T. Bahner, Department of Chemistry, Carson-Newman College
DB	Virginia-Carolina Chemical Corporation
DC	Dr. F. M. Berger, Mount Laboratories
DI	Armour Laboratories
DJ	Dr. Robert Lehman, Campbell Pharmaceutical Company
DK	Midwest Research Institute
DN	Dr. W. T. Sumerford
DO	Dr. L. Carroll King, Northwestern University
DP	William R. Warner, Inc.
DQ	Dr. Irving Kaye, Brooklyn College
DV	Dr. C. G. Overberger, Institute of Polymer Research, Polytechnic Institute of Brooklyn
DW	Dr. M. D. Hornedo
DZ	Dr. D. Wayne Wooley, Rockefeller Institute for Medical Research
EC	Rohm and Haas Company
EH	Dr. W. L. C. Veer, N. V. Organon
EI	Dr. Wilson M. Whaley, University of Tennessee
EJ	Dr. Marvin D. Armstrong, University of Utah, College of Medicine
EM	Geary Chemical Corporation
ZA	Dr. Donald Visser
ZB	Dr. H. Gilman, Iowa State University

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ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
	AMINES, PRIMARY:								
1028	Acetonylacetone derivative of Girard's reagent P	E		0/5	25	-2.0 / -2.0	13	1	50 mg/K toxic
1029	p-Amino acetophenone	CG		2/5	750	-0.5 / +1.5	12	2	
1030	o-Aminobenzenethiol	C		1/5	125	-1.5 / 0.0	13	2	
1031	p-Aminobutyrophenone	CG		0/5	125	-1.5 / -0.5	13	2	250 mg/K toxic
1032	2-Amino-4-chloro toluene .HCl	AN		2/5	250	-1.0 / -1.0	11	1	
1033	2-Amino-4-chloro-3,5-xylenol	E		1/10	300	-2.0 / -1.0	13	2	
1034	α-Aminocresol, methyl ether	AN		0/5	750	-3.0 / -4.0	12	6	
1035	p-Aminoenanthophenone	CG		2/5	250	+0.5 / 0.0	11	6	
1036	β-Aminoethyl-β'-carboxyethyl sulfide	AA		0/5	750	-0.5 / 0.0	13	1	
1037	2-Amino-1-phenyl-1,3-butanediol, dl form	C		1/5	750	-2.0 / 0.0	13	1	
1038	o-Aminopropiophenone	CG		1/5	500	-1.0 / -1.5	13	2	750 mg/K toxic
1039	Ammonium chloride, dimethyl hydroxyethylphenacyl-	C	m.186	0/5	10	-0.5 / +0.5	13	1	20 mg/K toxic
1040	Benzocaine	D		1/5	125	-1.0 / +3.5	13	4	250 mg/K toxic
1041	Benzyl (3-chloromethyl-2,4,6-trimethylbenzyl) dimethyl-ammonium chloride	C		0/5	5	-3.0 / -2.0	7	4	1 inj/day 10 mg/K toxic
1042	N-Benzyl-N-dodecyl-N-hydroxyethyl hydroxyethoxy ethyl ammonium chloride	CI		0/5	10	-1.0 / +1.5	7	4	35 mg/K toxic

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1043	4-Bromobenzyhydrylamine	C		3/10	35	-1.5 / -1.5	7	5	
1044	N-Carbazylmethylpyridinium chloride	W		0/5	750	0.0 / -1.5	13	1	
1045	4-Chlorobenzhydrylamine	C		0/5	35	-2.0 / -2.5	7	5	75 mg/K toxic
1046	N-(p-Chlorophenylacetyl)-N'-(pyridinium acetyl) succinic hydrazide chloride	E		0/5	600	-2.0 / -1.5	13	1	
1047	2,3-bis(o-Chlorophenylacetyl hydrazono) butane	E		1/5	50	-3.5 / -1.5	13	1	
1048	Cyclohexyl chloride of 2,8-dimethyl-5,11-methano dibenzo (b,f) (1,5)-diazocine (Troger's base)	CB		2/5	50	+0.5 / +0.5	12	2	125 mg/K toxic in gum acacia
1049	Diamino benzyl chlorohydrate	AN		1/5	175	0.0 / +0.5	13	2	
1050	p,p'-Diaminodiphenyl-2,2-dimethyl propane	D2		0/5	25	-1.0 / -1.0	11	4	50 mg/K toxic
1051	2-(2,4-Dichlorostyryl) quinoline methiodide	CY		0/5	25	+0.5 / +0.5	12	3	50 mg/K toxic in CMC
1052	2-(2,6-Dichlorostyryl) quinoline methiodide	CY		1/5	20	-2.0 / -1.5	10	2	
1053	2-(3,4-Dichlorostyryl) quinoline methiodide	CY		0/5	50	-1.0 / +0.5	12	3	75 mg/K toxic in CMC
1054	β,β-Difluoroethylamine	C; E		1/5	500	-1.0 / -0.5	13	1	also negative fresh daily
1055	2-(3,4-Diethoxystyryl) pyridine methiodide	CY		2/5	35	-1.0 / -0.5	12	2	
1056	2-(p-Diethylaminostyryl) quinoline methiodide	CY		0/5	1	-1.0 / -1.0	7	4	2 mg/K toxic
1057	1,2-Diformylhydrazine	CI		0/5	750	-2.0 / -1.5	13	1	

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1058	2-(2, 3-Dimethoxystyryl) quinoline methiodide	CY		1/5	50	-2.0 / +0.5	10	2	
1059	4-(p-Dimethylaminostyryl)-1-methyl pyridinium iodide	C		2/5	12	-3.0 / -2.5	7	3	16 mg/K toxic in CMC
1060	2-(p-Dimethylaminostyryl) quinoline methiodide	CY		0/5	10	-1.5 / +0.5	13	3	15 mg/K toxic in CMC
1061	4-(p-Dimethylaminostyryl) quinoline methiodide	CY		0/5	3	+0.5 / 0.0	13	3	6 mg/K toxic in CMC
1062	Dimethyl ammonium-3, 3-bis(1-propyne) bromide	EC		2/5	100	-2.0 / -1.5	10	1	
1063	3, 3-Diphenyl-5-bromomethyl-tetrahydrofuranone-2-diethylimmonium bromide	J		1/5	15	-1.5 / -2.5	7	4	25 mg/K toxic
1064	3, 3-Diphenyl-5-bromomethyl-tetrahydrofuranone-2-dimethylimmonium bromide	J		0/5	25	-2.0 / +0.5	7	4	66 mg/K toxic
1065	6-Ethoxy-2-(p-dimethylaminostyryl) quinoline methiodide	CY		1/5	12	-2.5 / -2.5	11	3	12 mg/K toxic in CMC
1066	Ethyl 5-oxo-1-phenyl-2-pyrazoline-3-carboxylate	CG		0/5	600	+1.5 / +1.0	13	2	
1067	Fluorene, 9-amino, -2-methylcarboxylate	F	m. 95	2/5	25	+1.0 / +1.0	13	3	75 mg/K toxic
1068	Formyl thiosemicarbazide	AA		1/5	500	+2.0 / -1.0	13	3	500 mg/K toxic in CMC
1069	d-Glucosamine . HCl			0/5	1500	+1.0 / +2.5	13	1	
1070	α, γ-Glycerol methylammonium bromide	C	m. 253	0/5	750	-1.5 / +1.0	13	1	
1071	Glycine			1/5	1000	-1.0 / -1.5	13	1	
1072	Hydracrylhydrazine	AA		0/5	500	0.0 / 0.0	13	1	

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1073	1-β-Hydroxyethyl-2-tridecyl-3-benzyl imidazolinium chloride	AA		0/5	3	-1.0 / 0.0	13	1	6 mg/K toxic
1074	p-Isooctylphenoxy-ethoxy ethyl benzyl dimethyl ammonium pentachlorophenate	AA		0/5	4	-1.5 / 0.0	13	4	2 inj/day 6 mg/K toxic
1075	4-Methylbenzhydrylamine	C		0/5	35	-1.5 / -1.0	13	6	75 mg/K toxic
1076	1-[2'-(1'-Methyl-6'-dimethylaminoquinolyl)]-2"-(2",5"-dimethyl-1"-phenyl-3"-pyrrolyl) ethylene chloride	AG2		2/5	1	+0.5 / -1.5	6	3	2 mg/K toxic
1077	3-Methyl-1-(β-hydroxy-β-phenylethyl) pyridinium iodide	DO	m. 123	0/5	63	+0.5 / +0.5	13	1	100 mg/K toxic
1078	3-Methyl-1-phenyl-5-pyrazolidone	CG		1/5	700	-0.5 / +1.0	13	2	
1079	Methyl-4-picolinium iodide	C	m. 154	0/5	500	-1.0 / -1.0	13	1	
1080	Methyl violet-2B	C		0/5	2	0.0 / +1.0	13	4	4 mg/K toxic
1081	β-Naphthylamine	AN		2/5	250	-1.5 / -1.5	7	5	1 inj/day
1082	1-β-Naphthyl-3-methyl-5-pyrazolone	E		1/5	500	-1.0 / -0.5	12	2	
1083	n-Octadecyltrimethyl ammonium pentachlorophenate	AA		2/5	10	+0.5 / -1.0	10	3	15 mg/K toxic
1084	1-Phenacyl-6-methoxy quinolinium iodide	DO		1/5	75	+0.5 / +0.5	10	3	125 mg/K toxic
1085	1-Phenyl-3-(p-anisoyl acetamino)-5-pyrazolone	E		2/10	500	-0.5 / 0.0	13	2	
1086	1-Phenyl-5-pyrazolone-3-carboxylic acid	C		3/10	500	+1.0 / -0.5	11	3	
1087	1,4-Phenylene di-3-(1-phenyl-5-pyrazolone)	E		1/5	750	-0.5 / 0.0	13	2	

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1088	Pyridinium, 1-(2-hydroxybenzoylmethyl)-iodide	C	m. 201	0/5	125	+2.5 / +0.5	13	1	
1089	Sanguinarine nitrate	D		0/5	10	-2.0 / +1.0	13	4	30 mg/K toxic
1090	2-Styrylquinoline methiodide	CY		0/5	25	-1.0 / -0.5	13	3	50 mg/K toxic
1091	Ethylene dipyridinium bromide	C	m. 276	1/5	700	-2.0 / -1.0	13	1	
1092	m-Tolidine	AN		1/5	125	+5.0 / +3.5	13	3	250 mg/K toxic
1093	α, α, α-Trifluoro-m-toluidine	C		0/5	12	-1.5 / -0.5	7	4	16 mg/K toxic
	AMINES, SECONDARY								
1094	3-n-Butyl aminoethylcarboxy-6-bromo coumarin . HCl	AQ		3/10	30	+4.5 / +1.0	13	3	2 inj/day 62 mg/K toxic
1095	β-n-Butylamino propionitrile	M		2/5	150	+1.5 / +2.0	13	4	250 mg/K toxic
1096	m-Chloroanilinomethylenemalononitrile	AW[5]		1/5	75	0.0 / -1.0	11	3	125 mg/K toxic
1097	4, 4'-Diamino diphenyl amine	AN		4/10	16	-1.0 / -0.5	12	2	
1098	3, 5-Dibenzylaminophenol . HCl	E		1/5	150	-2.0 / -1.0	7	4	200 mg/K toxic
1099	N-Di-(3, 3-dichloroallyl) amine . HCl	C		1/5	50	-2.5 / -0.5	13	4	63 mg/K toxic
1100	Diethylamine, di(β-cyano) . HCl	C		0/5	200	-1.0 / -0.5	13	1	300 mg/K toxic
1101	N-(3-hydroxyphenyl) laurylamine	E		0/5	750	+1.5 / -1.0	11	2	
1102	β, β-Iminodipropionic acid	C		0/5	500	0.0 / 0.0	13	1	

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1103	β,β-Iminodipropionitrile	C		0/5	750	-4.0 -0.5	7	4	
1104	2-Methyl-5-(4'-aminoanilino) coumarane . HCl	M		0/5	4	-4.0 -2.5	7	4	1 inj/day 12 mg/K toxic
1105	p-(N-Methylamino) benzoic acid	M		0/5	750	0.0 +1.0	13	1	
1106	α-Methylamino-p-cresol . HCl	C		0/5	700	-1.0 -1.0	13	1	
1107	Di-2-Thenylamine	AE		2/5	750	0.0 -0.5	9	6	2 inj/day
1108	p-(2,2,2-Trichloro-1-hydroxyethyl-1-amino)acetophenone	DN		1/5	175	-1.0 0.0	11	4	250 mg/K toxic
1109	Di (β-Phenylethyl) amine	CI		1/5	10	+1.0 -1.5	7	4	35 mg/K toxic
	AMINES, TERTIARY:								
1110	Acetoacetic acid, α-[4,4'-bis(dimethylamino) benzhydryl]-, ethyl ester	AE		1/5	700	0.0 -0.5	12	2	
1111	o-Aminodibutylaniline . HCl	M		0/5	20	-3.5 -0.5	7	4	1 inj/day 35 mg/K toxic
1112	6-Bromo-4-cyclohexyl-α-diethylamino-o-cresol	C		0/5	500	-4.0 -4.0	7	5	1 inj/day
1113	5-tert-Butyl-α-diethylamino-3-homopyrocatechol	C		0/5	500	-0.5 -1.0	13	3	
1114	4-tert-Butyl-α-dimethylamino-6-phenyl-o-cresol . HCl	C		0/5	62	+3.5 0.0	13	4	2 inj/day 100 mg/K 1 inj/day toxic
1115	n-Butyl-N,N-diphenylglycinate	M		0/5	700	+0.5 +4.0	13	6	
1116	6-Chloro-α-diethylamino-5-phenyl-o-cresol	C		0/5	500	-3.0 -4.0	7	5	1 inj/day
1117	6-Chloro-α-diethylamino-4-(1',1',3',3'-tetramethylbutyl)-o-cresol monophosphate	C		0/5	250	+2.0 -0.5	11	3	500 mg/K toxic

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1118	Cinnamic acid, α-cyano-p-dimethylamino, butyl ester	CI		1/5	700	-1.5 / +0.5	12	2	
1119	Cinnamic acid, α-cyano-p-dimethylamino, ethyl ester	CI		0/5	600	+1.0 / +0.5	13	2	
1120	Cinnamic acid, α-cyano-p-dipropylamino, ethyl ester	CI		0/5	700	-1.5 / -0.5	13	2	
1121	Copolymer formed from methacrylic acid and 2-(N, N-diethylamino) ethyl methacrylate	DV		0/5	25	-1.5 / -2.0	13	1	35 mg/K toxic
1122	N-Cyclohexyl-N-β-chloroethyl-N-β-(o-benzylphenoxy) ethylamine . HCl	BX		2/5	25	-2.0 / -0.5	5	2	fresh daily
1123	1, 1'-Cyclohexyliminodi(2-propanol)	CG		0/5	125	-1.5 / -1.0	13	6	250 mg/K toxic
1124	Cyclooctylamine, N, N-dimethyl-2-hydroxy-	CI		0/5	32	-1.5 / 0.0	12	4	2 inj/day
1125	Dibenzoyl (dimethylamino) ethylene	CX		0/5	500	0.0 / -1.5	13	1	
1126	1-Dibenzylamino-2-chlorobutane . HCl	J		0/5	20	-2.5 / -0.5	13	4	30 mg/K toxic
1127	β, β'-(3, 5-Dichloro-2-hydroxybenzylimino) dipropionitrile	C; EC		0/5	500	0.0 / 0.0	13	2	
1128	2-Diethylaminomethyl-3, 5-dimethylphenol . HCl	C		0/5	125	0.0 / -1.5	13	1	250 mg/K toxic
1129	α-Diethylamino-4-(1-phenylcyclohexyl)-o-cresol . HCl	C		0/5	32	-1.5 / +1.0	13	4	2 inj/day 65 mg/K 1 inj/day toxic
1130	α-Diethylamino-5-phenyl-3-homopyrocatechol	C		0/5	500	-1.5 / -1.0	13	2	also negative in gum acacia
1131	α^2-Diethylamino-α^4-phenyl-2, 4-xylenol . HCl	C		1/5	63	-2.0 / +1.0	12	4	2 inj/day 75 mg/K 1 inj/day toxic
1132	3-Diethylamino-1, 1, 1-trichloro-3-methyl butane . HCl	C		0/10	512	0.0 / +2.0	13	1	

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1133	5,10-Diethyl-6,9-dimethylamino-7-tetradecylyne	EC		0/5	750	-0.5 / -1.0	13	6	
1134	Dimethylaminoacetonitrile	AA		0/5	35	-2.0 / +0.5	12	5	63 mg/K toxic
1135	1-Dimethylamino-2-butyne	EC		2/10	65	-2.5 / -1.5	7	4	
1136	Dimethylaminoethyl sulfate, inner salt	A		0/5	500	-1.0 / +0.5	7	1	fresh daily
1137	β-Dimethylaminoisopropyldiphenylacetonitrile	C		2/5	60	-0.5 / 0.0	7	4	1 inj/day
1138	1,2-bis(Dimethylamino)-4-methoxybenzene .2 HCl	M		0/5	500	+2.0 / +1.5	13	1	
1139	Dimethyl di-n-butyl amino acetal	DQ		0/5	100	-2.0 / -0.5	10	6	250 mg/K toxic
1140	2,2-Diphenyl-5-dibutylamino-4-pentane lactone .HCl	J		2/5	200	-0.5 / +0.5	13	1	
1141	2,2-Diphenyl-5-dimethylamino-4-pentanolactone .HCl	J		2/5	75	-2.0 / -2.5	7	4	
1142	Ethylene bis iminodiacetic acid	C		1/5	150	+3.0 / 0.0	13	3	250 mg/K toxic
1143	N-Ethyl-N-(2-chloroethyl)-1,2-diphenylethylamine .HCl	DK		1/5	8	-1.0 / -1.0	13	1	16 mg/K toxic
1144	Stilbene, 2-chloro-4'-dimethylamino-	F	m.105	1/5	75	+4.0 / 0.0	13	3	125 mg/K toxic
1145	Stilbene, 4-dimethylamino-2'-methyl-	T		0/5	63	-2.0 / 0.0	13	5	
	AMINO ACIDS:								
1146	α-Acetaminocinnamic acid	AW5		0/5	250	-1.0 / 0.0	10	4	300 mg/K toxic
1147	p-Acetoxy-α-acetaminocinnamic acid	AW5		0/5	600	0.0 / -1.0	13	2	

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1148	DL-Alanine	CG		0/5	1000	-2.0 / -1.5	13	1	
1149	D-Alloisoleucine	CG		0/5	1000	0.0 / +0.5	13	2	
1150	3-Aminotyrosine .2HCl	E		0/5	750	-2.0 / -1.5	13	1	
1151	α-Amino-γ-phenyl-n-butyric acid	EJ		1/5	700	-0.5 / 0.0	13	2	
1152	S-Amyl-L-cysteine	EJ		0/5	750	+1.0 / 0.0	13	2	
1153	S-Benzyl-L-cysteine	EJ		0/5	750	+0.5 / 0.0	13	2	
1154	o-Bromophenylalanine	AW5		0/5	500	+1.5 / -1.5	13	2	
1155	p-Bromophenylalanine	AW5		3/10	500	-1.5 / -2.0	13	2	
1156	S-Carboxymethyl-DL-homocysteine	EJ		0/5	750	+1.0 / 0.0	13	2	
1157	N-p-Chloroacetylphenyl glycine	E		1/5	150	-1.5 / +0.5	12	2	
1158	o-Chlorophenylalanine	AW5		1/5	750	-1.5 / -1.5	13	1	
1159	m-Chlorophenylalanine	AW5		0/5	500	0.0 / -1.5	13	2	
1160	p-Chlorophenylalanine	AW5		0/5	500	+1.5 / -1.5	13	2	
1161	β-p-Chlorophenyl serine	C		0/5	600	+0.5 / +0.5	13	2	
1162	α,α-Diaminoadipic acid	W		2/5	400	-1.0 / +4.0	12	2	
1163	N-Dichloroacetyl-DL-valine	AW5		1/5	750	-1.5 / +0.5	13	2	

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1164	β,β-Diphenylalanine	C		0/5	500	+3.0 / 0.0	12	3	750 mg/K toxic in CMC
1165	Disodium p-(N-methylamino) benzoylglutamate	M		0/5	750	0.0 / +1.0	13	1	
1166	Glycine, α,α-diphenyl-, sodium salt	AE		0/5	85	+3.5 / +3.5	13	3	125 mg/K toxic
1167	α-Guanidino propionic acid	EJ		0/5	600	-1.0 / -1.0	13	1	
1168	N-(β-Hydroxyethyl)-β-alanine	AA		0/5	750	-0.5 / 0.0	13	1	
1169	N-Iodoacetyl phenyl alanine	AW5		0/5	65	+1.0 / +1.0	13	2	125 mg/K toxic
1170	L-Leucine, N-(2-cyanoethyl)-	AE		2/5	125	-4.0 / +1.0	10	3	250 mg/K toxic
1171	DL-Methionine methyl sulfonium iodide	DI		0/5	750	-2.5 / -2.0	13	1	
1172	Methoxinine (α-amino-γ-methoxybutyric acid)	M	m. 245 dec.	2/15	500	-3.5 / -2.0	13	1	
1173	S-Methyl-L-cysteine	EJ		0/5	750	-0.5 / -1.0	13	1	
1174	DL-Norleucine	CG		0/5	1000	0.0 / +0.5	13	2	
1175	α-Phenylalanine	C		0/5	1000	0.0 / +0.5	13	2	
1176	2-Phenylbenzyl aminoacetic acid	EH		1/5	65	-0.5 / -1.0	11	2	100 mg/K toxic
1177	S-γ-Phenylpropyl-L-cysteine	EJ		0/5	750	+1.0 / 0.0	13	2	
1178	L-Tyrosine, N-(2-cyanoethyl)-	AE		1/5	40	+0.5 / 0.0	10	3	75 mg/K toxic
1179	Violet cobalt (III) DL-alanine $\cdot H_2O$	BL		2/5	32	+1.5 / 0.0	13	3	63 mg/K toxic

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	ANTI-METABOLITES AND ANALOGS:								
1180	β-Acetylpyridine	D		0/5	125	+1.0 / 0.0	7	4	1 inj/day 250 mg/K toxic
1181	5-Amino-7-hydroxy-2-p-sulfophenyl-v-triazolo (d) pyrimidine	BL		1/5	125	-1.0 / +1.0	13	2	
1182	4-Amino-3,5-dibromopteroylglutamic acid	M		2/5	100	+3.0 / -0.5	13	3	
1183	N-[4-(5-Amino-7-hydroxy-2-v-triazolo (d) pyrimidyl) benzoyl] glutamic acid	BL		2/5	500	+4.5 / +2.0	13	3	
1184	4-Aminopteroyltryptophane	M		4/10	500	-1.5 / -3.0	13	3	
1185	2-Azaadenine	DZ		1/5	50	-1.5 / 0.0	13	2	75 mg/K toxic
1186	2-p-Carbethoxyphenyl-5-amino-7-hydroxy-v-triazolo (d) pyrimidine	BL		0/5	300	+3.0 / 0.0	13	3	500 mg/K toxic
1187	2-p-Carboxyphenyl-5-amino-7-hydroxy-v-triazolo (d) pyrimidine	BL		0/5	16	+2.5 / 0.0	13	3	32 mg/K toxic
1188	2-p-Carboxyphenyl-5,7-diamino-v-triazolo (d) pyrimidine	BL		1/5	75	+4.0 / +2.0	13	3	125 mg/K toxic
1189	2-(4-Chlorophenyl)-5-amino-7-hydroxy-2-v-triazolo (d) pyrimidine . 1/2 H_2O	M	m. 375	2/5	700	-1.0 / -0.5	13	2	
1190	Dichloropteroylglutamic acid	M		1/5	125	+2.0 / -1.5	11	3	250 mg/K toxic
1191	N^2, N^2-Dimethylpteroylglutamic acid	M		0/10	500	-1.5 / -0.5	13	2	
1192	9,10-Dimethylpteroylglutamic acid	M		2/5	600	+0.5 / -1.0	11	2	
1193	Diopterin. (Pteroyl di glutamic acid)	AG		2/5	2000	-1.0 / -0.5	12	1	
1194	2-(4-Methoxyphenyl)-5-amino-7-hydroxy-2-v-triazolo (d) pyrimidine	M	m. > 375	0/5	250	+1.0 / -1.5	13	3	500 mg/K toxic

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1195	N^{10}-Methylpteroic acid	M		2/5	500	-3.5 / -1.5	11	2	
1196	N^{10}-Methylpteroylglutamic acid	M		0/5	500	+0.5 / +2.0	13	1	
1197	9-Methylpteroylglutamic acid	M		2/5	500	-3.5 / -1.5	10	2	
1198	2-Phenyl-5-amino-7-hydroxy-v-triazolo-(d)-pyrimidine	BL		2/10	750	+4.0 / +2.0	13	3	
1199	2-(4-Styrylphenyl)-5-amino-7-hydroxy-2-v-triazolo (d) pyrimidine	M	m. 300	2/5	125	+1.0 / +1.0	12	3	250 mg/K toxic
	AZO COMPOUNDS:								
1200	N-Allyl-N-(4-nitro-2-tolylazo) glycine	M		1/5	250	-4.0 / -1.0	6	1	1 inj/day fresh daily
1201	2-Amino-4-nitro phenol coupled with phenyl methyl pyrazolone	E		2/5	250	0.0 / -1.0	12	2	
1202	5-Aminotetrazol coupled with H-acid	E		0/5	750	+0.5 / +3.0	13	1	
1203	Anthranilic acid coupled with 1, 3-α-diaza-2-indanone	E		1/5	250	-2.5 / -0.5	13	1	500 mg/K toxic
1204	Anthranilic acid coupled with phenyl methyl pyrazolone	E		1/5	175	-2.5 / -0.5	10	1	200 mg/K toxic
1205	Amino azobenzene base	AN		3/10	125	-1.0 / -0.5	13	2	
1206	Amino azo toluene base	AN		1/5	150	-3.5 / -0.5	13	4	250 mg/K toxic
1207	Benzene azo-2-(2-nitropropane)	AR		0/5	200	-3.5 / -1.0	7	5	1 inj/day 300 mg/K toxic
1208	Benzidine-3, 3'-disulfonic acid coupled with 1, 3α-diaza-2-indanone	E		0/5	300	-0.5 / +1.5	11	1	500 mg/K toxic
1209	(4, 4'-Biphenylene bis azo) bis (5-guanylurea)	M		0/5	500	-1.0 / +0.5	13	2	also negative in gum acacia

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1210	p-(p-Bromoacetaminophenylazo) benzene	E		0/5	50	-3.0 / -1.5	11	2	100 mg/K toxic
1211	Dehydrothio-p-toluidine-7-sulfonic acid coupled with 1,3α-diaza-2-indanone	E		0/5	700	-1.0 / +1.5	13	2	
1212	2,4-Diamino-6-hydroxy-5-p-nitrophenylazo pyrimidine	BL		2/5	400	-1.5 / 0.0	12	2	
1213	2,4-Diamino-6-hydroxy-5-p-sulfophenylazo pyrimidine	BL		0/5	125	0.0 / +1.0	13	2	200 mg/K toxic
1214	2,2'-Diazoaminofluorene	F	m.193	2/5	500	+3.5 / +1.0	13	3	
1215	Diazo-1-amino-2-naphthol-4-sulfonic acid	AN		0/5	700	-1.5 / 0.0	13	1	
1216	Nickel complex of 2,2'-dicarboxy formazyl cyanide	E		4/10	250	-1.0 / 0.0	12	2	
1217	2,4-Dichloroaniline-6-sulfonic acid coupled with 1,3-diaza-2-indanone	E		0/5	175	-2.5 / 0.0	13	1	300 mg/K toxic
1218	5-(2,5-Dichloro phenylazo) guanylurea	M		0/5	500	-1.0 / 0.0	7	1	suspension 1 inj/day fresh
1219	N-(2,5-Dichlorophenylazo)-N-(1,2,3,4-tetrahydroxy-valerylmethyl) 3,4-xylidine	W		0/5	250	-2.0 / -0.5	13	2	more toxic in gum acacia
1220	3,4-Dimethylamino phenylazo quinoline	M		0/5	500	-3.5 / -0.5	7	3	1 inj/day fresh daily
1221	N,C-Diphenyl-N'-p-carboxyphenyl formazan	BL		0/5	750	+0.5 / 0.0	12	2	
1222	N,C-Diphenyl-N'-p-carbutoxy phenyl formazan	BL		0/5	750	+0.5 / 0.0	12	2	
1223	Disulfodehydro-thio-p-toluidine coupled with 1,3α-diaza-2-indanone	E		1/5	300	-1.0 / -1.0	13	2	
1224	Ethyl formazyl carboxylate	E		0/5	700	-1.5 / -0.5	13	2	
1225	4-(2-Hydroxy-5-nitrophenylazo)-3-methyl-5-pyrazolone, chromium derivative	CI		0/5	500	-3.0 / +0.5	13	2	

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1226	Naphthionic acid coupled with 1, 3α-diaza-2-indanone	E		0/5	700	-2.0 / -1.5	12	1	
1227	2-Naphthylamine-6, 8-disulfonic acid coupled with 1, 3α-diaza-2-indanone	E		0/5	600	-1.0 / -0.5	13	1	
1228	5-(4-Nitro phenylazo) guanylurea	M		0/10	500	-0.5 / +1.0	13	1	
1229	p-phenylazophenoxyacetic acid	CG		0/5	250	0.0 / 0.0	7	3	500 mg/K toxic 1 inj/day fresh daily
1230	5-Phenylazosaligenin	CI		1/5	600	-1.0 / +1.5	12	2	
1231	2-Phenyl-4, 6-bis (phenylazo) phenol	CG		1/5	750	-2.0 / 0.0	13	6	suspension
1232	2, 5-bis (phenylazo) pyrrole	CI		1/5	750	+0.5 / +0.5	13	2	
1233	Sodium salt of 2-(4-sulfobenzene diazomercapto) naphthalene	AA	dec. > 180	1/5	64	+2.0 / +1.0	13	3	128 mg/K toxic
1234	Sulfanilic acid coupled with 1, 3α-diaza-2-indanone	E		0/5	550	-1.0 / -0.5	13	1	
1235	2, 4, 6-Triamino-5-p-carboxyphenylazo pyrimidine	BL		0/5	300	+2.5 / 0.0	13	3	500 mg/K toxic
	CARBAMATES AND THIOCARBAMATES:								
1236	n-Amyl carbamate	DN		0/5	100	-1.5 / -2.0	7	4	200 mg/K toxic
1237	Benzene, 1, 4-bis (methylcarbamyloxy)-2-isopropyl-5-methyl-	A		3/10	5	-1.0 / +0.5	11	3	10 mg/K toxic
1238	2-Benzothiazolyl morpholinylthioformyl sulfide	BP		1/10	500	-2.5 / +0.5	12	2	
1239	Benzyl carbamate	DN		0/5	125	-2.0 / -2.0	7	4	200 mg/K toxic
1240	Benzyl dibutyl dithiocarbamate	BP		0/10	500	-1.5 / -1.0	13	6	

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1241	n-Butyl-N-α-methyl-β-phenylethyl carbamate	N1		0/5	63	-1.0 / +1.5	13	5	100 mg/K toxic
1242	Carbamic acid, p-aminobenzoic acid, ethyl ester	G		2/5	750	+1.0 / +1.0	11	3	
1243	Carbamic acid, o-aminobenzoic acid, ethyl ester	G		2/5	400	+2.5 / +1.0	12	3	
1244	Carbamic acid, N-cyclohexyl octyl ester	L	m.45	1/10	500	-3.5 / +0.5	13	4	
1245	Carbamic acid, N,N-dimethyl-p-diethylaminophenyl ester allyliodide			1/5	60	-0.5 / -1.0	12	1	
1246	Carbamic acid, N,N-dimethyl-4-dimethylamino-3-iso-propylphenyl ester methochloride			0/5	0.75	-2.5 / -2.5	13	1	0.15 mg/K toxic
1247	Carbamic acid, N,N-dimethylphenyl ester	A		0/5	128	+2.5 / +0.5	13	3	200 mg/K toxic
1248	Carbamic acid, N-methyl-p-dimethylaminophenyl ester allyliodide	A		2/5	12	-0.5 / -1.0	12	1	
1249	Carbamic acid, methyl ester	AE		1/5	750	+2.5 / +0.5	13	1	
1250	Carbamic acid, N-phenyl-m-(diethylamino) phenyl ester methiodide			1/5	1	+4.5 / +3.5	13	3	2 mg/K toxic
1251	α-Carbamyl mercapto acet semicarbazide	E		0/5	500	-1.0 / +0.5	13	2	
1252	Ethyl N(α-carboxyethyl) carbamate	W		2/5	350	-3.0 / -2.5	13	1	
1253	N-Carbethoxy-4-amino-1,2,4-triazole	BI		0/5	750	-2.0 / -1.5	13	1	
1254	N-Carbethoxy cotarnine	EI		2/10	500	0.0 / +0.5	13	2	
1255	N-Carbethoxy-DL-alanine	W		1/5	400	-4.0 / +0.5	13	1	
1256	N-Carbethoxyglycine, ethyl ester	G		1/5	250	-1.5 / 0.0	10	7	

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1257	N-Carbethoxymethionine	W		0/5	66	-1.0 / -1.0	7	4	100 mg/K toxic
1258	p-Chlorophenyl urethan	G		2/5	250	+4.0 / +1.0	13	3	300 mg/K toxic
1259	m-Chlorophenyl urethan	G		3/10	32	-0.5 / 0.0	10	4	2 inj/day 63 mg/K toxic
1260	Dicarbamic acid, o-phenylene, ethyl ester	G		2/5	750	+2.0 / +1.0	11	3	
1261	N, N'-Dicarbethoxyurea	W		0/5	750	+1.0 / +1.5	12	2	
1262	Diethylammonium diethyldithiocarbamate	BP		0/5	250	0.0 / -0.5	13	4	300 mg/K toxic
1263	N, N-Diethyl-p-(t-amyl) phenyl thionocarbamate	BP		0/5	75	+5.0 / -1.0	12	3	125 mg/K toxic
1264	Diethyl azamalonate	Z		0/5	750	-2.5 / 0.0	7	1	fresh daily
1265	N, N-Diethyl-o-cyclohexylphenyl thionocarbamate	BP		2/5	500	-3.0 / -1.5	9	4	
1266	Diethyleneglycol-bis-(bicarbamate), diethyl ester	W		0/5	750	+4.5 / +4.0	13	2	
1267	Diethylene glycol dicarbamate	G		2/5	700	+4.5 / +2.5	11	3	
1268	N, N-Diethyl pentachlorophenyl thionocarbamate	BP		2/5	600	+3.0 / 0.0	13	3	
1269	2, 2-Diethyl-1, 3-propane dicarbamate	DC		0/5	500	-1.0 / -1.0	11	3	750 mg/K toxic in CMC
1270	Diethyl-n-propylazamalonate	Z		0/5	125	-2.0 / +0.5	13	4	
1271	(N, N-Diethylthiocarbamyl) (morpholinylthioformyl) sulfide	BP		0/5	750	-2.0 / -1.0	11	4	
1272	Bis(N, N-Diethylthiocarbamyl) (piperazinylthioformyl) sulfide	BP		0/5	600	-3.5 / -1.5	12	3	

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1273	β-Dimethylaminoethyl phenyl thiourethane .HCl	Z		2/5	350	+0.5 / -2.0	11	1	
1274	2,4-Dinitrophenyl urethane	M		0/5	600	0.0 / -1.0	9	3	
1275	Disodium-1,3-butane, bis (dithiocarbamate)	BP		0/5	400	0.0 / -1.5	12	4	600 mg/K toxic
1276	Dodecylurethane	BI		3/10	200	-2.0 / -0.5	10	4	
1277	Ethyl N-o-biphenyl carbamate	L	b.138 0.3 mm.	1/15	500	-2.5 / -1.0	7	4	1 inj/day
1278	Ethyl-N-cyclohexyl carbamate	W		1/5	80	-1.5 / +0.5	13	4	100 mg/K toxic
1279	Ethyl-N,N-dicyclohexyl carbamate	L		0/5	35	-2.5 / -1.0	7	4	1 inj/day 70 mg/K toxic
1280	Ethyl-N,N-diphenylcarbamate	D		2/5	250	+5.0 / +1.0	13	3	350 mg/K toxic
1281	Ethyl diethyl dithiocarbamate	AA	b.89 0.7 mm.	0/5	500	+3.0 / +0.5	13	6	750 mg/K toxic
1282	Ethylene diurethane	G	m.111	2/5	400	+0.5 / -1.0	12	3	
1283	Ethyl N-(α-hydroxyisobutyroyl)-carbazate	W		0/5	700	-2.0 / -2.0	13	1	
1284	Furfurylurethane	BI		0/5	50	-1.5 / -1.5	13	4	100 mg/K toxic
1285	Hexamethylene diurethane	G	m.84	4/15	500	+1.0 / -0.5	12	3	
1286	Hydrazodicarboxylic ester	G	m.132	2/5	120	0.0 / -0.5	12	1	
1287	Hydroquinone bisdimethylurethane	DI	m.129	2/5	100	+1.5 / +0.5	13	3	
1288	m-Hydroxyphenyl-N-octadecylcarbamate	L	m.87	1/5	700	+1.0 / -0.5	10	3	

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1289	Isobutyl-N-α-methyl-β-phenylethyl carbamate	N1		5/10	63	-2.0 / -1.0	11	4	125 mg/K toxic
1290	Isobutyl-N-β-phenyl ethyl carbamate	N1		2/10	500	-2.5 / -0.5	13	4	
1291	Isopropyl-N-phenyl carbamate	L	m.87	0/5	32	+0.5 / +0.5	13	3	64 mg/K toxic
1292	Isopropyl-N-β-phenylethyl carbamate	N1		3/10	175	-2.0 / -1.0	11	4	250 mg/K toxic
1293	p-Methoxybenzyl-N-phenylcarbamate	DN		0/5	200	-0.5 / -2.0	7	4	400 mg/K toxic
1294	Methyl N,N-dimethyl carbamate	W		0/5	600	-1.5 / 0.0	13	6	
1295	Morpholine, N-carbethoxy-	G		0/10	500	-1.0 / +1.0	13	4	2 inj/day
1296	N-Octadecyl carbamate	W		0/5	900	-2.0 / -1.5	11	3	
1297	Octyl-N-phenyl carbamate	L	m.69	2/5	700	+2.5 / +1.0	11	3	
1298	Bis /(2), 3-phenyl-4,5-dimethyl-4-thiazolinyl/ thiuram disulfide	AA		1/5	500	+2.5 / -0.5	13	2	
1299	p-Phenylenediamino bis (methyldimethyldithiocarbamate)	AA		0/5	150	+1.5 / -1.5	13	2	300 mg/K toxic
1300	p-Phenylene bis (N,N-diethyl thionocarbamate)	BP		2/15	500	+2.5 / -1.0	11	3	
1301	m-Phenylene diurethan	G		2/5	750	+2.5 / -2.0	11	3	
1302	Propylene diurethane	G	m.82	1/5	750	-1.5 / -0.5	13	1	
1303	m-Phenylene di-N-octadecylcarbamate	L	m.121	2/15	250	+1.5 / -0.5	12	3	
1304	β-/N-β-Phenylisopropyl-N-methyl-amino ethyl/ phenyl-urethane .HCl	Z		2/5	128	+1.0 / +2.0	12	2	

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1305	The bis Phenylurethane of 2-methyl-2-diethylamino propane-1, 3-diol . HCl	Z		0/5	256	+2.0 / +0.5	13	3	400 mg/K toxic
1306	n-Propyl-N-β-phenylethyl carbamate	N1		0/5	600	-1.5 / 0.0	13	6	
1307	Piperidino propanediol bis ethyl urethane . HCl	Z		0/5	500	-1.0 / -2.0	13	1	
1308	Piperidinopropanediol mono ethyl urethane . HCl	Z		0/5	750	-1.0 / 0.0	13	1	
1309	α-pyridylurethane	BI		2/5	250	-1.0 / -1.5	11	2	350 mg/K toxic in gum acacia
1310	8-Quinolylphenylcarbamate	W		1/5	1000	+0.5 / -1.5	13	3	
1311	Sodium /3-(β-chloroethyl)-4, 5-dimethyl-4-thiazolinyl/ dithiocarbamate	AA		2/5	400	0.0 / +1.5	13	2	
1312	Sodium dibutyl dithiocarbamate	BP		0/5	108	-1.0 / -0.5	13	4	150 mg/K toxic
1313	Sodium diethyl dithiocarbamate			0/5	600	-1.0 / -1.0	13	1	
		BP		2/5	400	0.0 / -1.5	10	4	500 mg/K toxic
1314	Sodium dimethyl dithiocarbamate	BP		1/5	750	+3.5 / -1.5	10	3	
1315	Sodium dioctyl dithiocarbamate	BP		3/10	32	-1.5 / -0.5	7	4	1 inj/day 50 mg/K toxic
1316	Sodium N, N-diphenyl dithiocarbamate	AA		2/5	700	-2.0 / 0.0	10	1	
1317	Sodium 3-hydroxy butyldithiocarbamate	BP		1/5	750	-1.5 / -1.0	12	4	
1318	Sodium methyl benzyl dithiocarbamate	BP		2/10	300	+0.5 / -1.5	10	3	500 mg/K toxic
1319	Sucrose dicarbamate	BP		0/5	750	-1.5 / -2.0	13	1	

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1320	Tetramethylene diurethan	G	m.94	2/5	500	+1.5 / -0.5	11	3	
1321	Tetramethyl thiuram disulfide	BP		0/5	175	+1.0 / -1.0	10	3	250 mg/K toxic
1322	Tetraphenyl thiuram disulfide	AA		0/5	600	0.0 / -0.5	13	2	
1323	2,4,6-Tribromo phenyl urethane	BI		0/5	350	+2.5 / -0.5	13	3	500 mg/K toxic
1324	Triethyl N-tricarboxylate	M	b.110 2 mm.	0/5	700	-3.0 / -1.5	7	5	1 inj/day
1325	p-Xylylene diurethane	G	m.138	4/15	25	+3.5 / -0.5	11	3	50 mg/K toxic
	COMPOUNDS WITH CONJUGATED UNSATURATION:								
1326	β-Acetylacrylic acid	AW2		1/5	66	-2.5 / -0.5	8	1	2 inj/day
1327	9-Acridone	AP		0/5	750	-0.5 / -0.5	12	2	
1328	Allyl-p-methoxybenzoyl acrylate	EC		2/5	5	-1.0 / -1.5	7	4	15 mg/K toxic
1329	2-Amino anthraquinone coupled with β-naphthyl amine	E		1/5	600	-0.5 / -0.5	13	2	
1330	1-Amino-2-bromoanthraquinone	CI		0/5	500	0.0 / +0.5	13	2	
1331	2-Amino-3-chloro-1,4-naphthoquinone	CI		2/5	125	-0.5 / -0.5	13	2	
1332	2-Anthraquinone carboxylic acid	C		1/5	500	-1.0 / 0.0	11	3	750 mg/K toxic in CMC
1333	Anthraquinone disulfonic acid ester	M		0/5	750	-2.0 / -2.0	13	2	
1334	Benzal pyruvic acid,potassium salt	E		2/10	500	-1.5 / -1.0	13	1	

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1335	Benzil	AP		0/5	500	-2.5 / -2.0	5	5	1 inj/day
1336	Benzil monophenylhydrazone	E		1/5	750	-0.5 / +0.5	13	2	
1337	1,4-Benzoquinone	AP		0/5	10	+1.5 / -1.0	6	3	32 mg/K toxic
1338	1-Benzoyl-2-p-dimethylaminophenyl ethylene	E		0/5	700	0.0 / 0.0	13	2	
1339	4,8-Bis(α-Chloro-β-hydroxypropylamino) anthrarufin-2,6-disulfonic acid, ammonium salt	E		0/5	300	-2.0 / -0.5	12	2	
1340	1,5-bis(3-Chloro-2-hydroxy propylamino) anthrarufin disulfonic acid	E		0/5	200	-5.5 / -2.0	6	1	300 mg/K toxic
1341	N-Cinnamoyl glycine	D		4/10	500	-1.5 / +1.5	5	4	
1342	Decachloro-m-terphenyl-x,x,xx-tetrone	L		1/5	6	-4.5 / -2.0	5	5	12 mg/K toxic
1343	Decane-3,4,5,6-tetrone	E		0/5	500	-0.5 / +1.5	13	2	
1344	Diacetyl	C		0/10	500	-1.0 / -1.0	13	1	
1345	Diacetyl caffeic acid	E		2/5	350	-0.5 / +0.5	13	2	
1346	Dibutyl-2,5-diketo-3-cyclohexenylthiothionophosphate	AP		1/5	100	-4.0 / -4.0	5	5	
1347	o,o'-Dihydroxybenzalacetophenone sodium bisulfite	M		1/10	500	+1.5 / +3.5	7	4	1 inj/day
1348	Diisophorone	EC		0/5	125	-2.0 / -1.0	7	4	175 mg/K toxic
1349	Dimethyl chloro maleate			0/5	5	-2.5 / 0.0	13	4	2 inj/day 8 mg/K toxic
1350	Dimethyl-α-methoxy-2-buten-1,4-dioate	EC		3/10	500	-3.0 / -2.0	7	4	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1351	2,7-Dinitro xanthone	C ; EC		1/5	500	-2.0 / +1.5	13	2	
1352	Ethyl-β-ethoxy-α-chloro-2-propenoate	EC		2/5	50	+0.5 / -3.0	5	5	
1353	Fumaric acid	E		0/5	500	-1.5 / -1.0	13	1	
1354	Furfural phenoxy acetone	E		1/5	750	-3.0 / 0.0	13	2	
1355	1-Hydrazine anthraquinone	E		0/5	700	0.0 / -1.0	13	2	
1356	Hydrazo maleic acid	C		0/5	500	-0.5 / -0.5	13	2	
1357	2-o-Hydroxycinnamenyl pyridine	E		2/5	100	-2.0 / 0.0	9	2	
1358	N-Isopropyl-α-methylacrylamide	Q		0/5	350	-0.5 / -2.0	7	4	500 mg/K toxic
1359	Maleamide	AW5		0/5	500	-2.5 / 0.0	13	2	
1360	1-(3', 4'-Naphthoquinonyl)-2-(4', 4'-bis dimethylamino phenyl) ethylene	E		0/5	500	-2.0 / 0.0	11	2	
1361	1-(m-Nitro benzoyl)-2-(m-nitrophenyl) ethylene	E		0/5	500	-1.0 / -0.5	13	2	
1362	p-Phenylene dioxime succinate ester	AP		1/5	64	+2.0 / 0.0	11	3	128 mg/K toxic
1363	α-Phenyl-o-hydroxycinnamonitrile	E		0/5	500	0.0 / -0.5	13	2	
1364	1,4-Quinone diimine, 2-chloro-N,N'-dihydroxy-	AP		2/5	64	+2.0 / 0.0	11	3	128 mg/K toxic
1365	p-Sulfamylacrylanilide	E		2/5	300	-0.5 / -0.5	13	2	
1366	1,4-di-β-Sulfo ethylamino-5,8-dihydroxyanthraquinone, potassium salt	E		0/5	600	-1.5 / 0.0	13	1	

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1367	1 p-Tolyl-4-bromotriazol anthraquinone	E		1/5	600	-2.0 / -0.5	11	2	
1368	3,5,5-Tribromo-2,2-dihydroxy chalcone	C ; E		1/5	500	+2.0 / +1.5	13	2	
1369	Trichloromethyl-5,8,9,10-tetrahydro-5,8-methano-1,4-naphthoquinone-3-sulfide	AP		0/5	150	-1.5 / -2.0	7	5	
	MUSTARDS, NITROGEN AND SULFUR:								
1370	N-(γ-Aminopropyl)-2,2-dimethyl ethyleneimine	W		0/5	25	-2.5 / -1.0	13	1	35 mg/K toxic
1371	1-Benzyl-2-phenyl-3-benzoylethyleneimine (cis)	CA		0/5	30	-0.5 / +3.0	13	1	suspension 63 mg/K toxic
1372	N,N'-di-(β-Bromoethyl)-N,N'-di(ethylene) ethane-1,2-diimonium bromide	D		0/10	512	-2.0 / 0.0	7	1	fresh daily
1373	n-Butyl-bis(β-fluoroethyl) amine . HCl	D		2/5	10	-1.5 / +0.5	7	1	fresh daily
1374	N-2-Chloroethyl-4-aminostilbene . HCl	M		1/5	50	+1.0 / 0.0	12	2	90 mg/K toxic in propylene glycol
1375	bis-β-Chloroethyl cholesterylamine . HCl	C		1/5	700	-0.5 / -0.5	13	2	
1376	N,N'-bis(β-Chloroethyl)-N,N'-dibenzyl-1,3-diamino-propane . 2HCl	J		0/5	2	-1.5 / -1.5	7	1	1 inj/day fresh 4 mg/K toxic
1377	4-Chloro-2-ethyleneimino-6,7-dihydroimidazo-[1,2-a]-s-triazine	M		1/5	8	-1.5 / +0.5	7	1	1 inj/day (suspension); 10 mg/K toxic (2 inj)
1378	bis(β-Chloroethyl)-α-naphthylmethylamine	C		0/5	125	-0.5 / -1.5	7	1	fresh daily 250 mg/K toxic
1379	1-Cyclohexyl-2-phenyl-3-benzoylethyleneimine (cis)	CA		2/10	500	+0.5 / +3.0	13	1	suspension
1380	2-Diethylamino-4,6-bis-ethyleneimino-s-triazine	M		0/5	1	-2.0 / -4.0	6	5	1 inj/day 2 mg/K toxic
1381	N,N-Dihexyl-β-chloroethylamine . HCl	J		0/5	2	-1.5 / -1.5	13	4	4 mg/K toxic

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1382	3,4-Dimethoxydibenzyl-β-chlorethylamine . HCl	J		2/5	4	-2.0 / -1.5	7	1	fresh daily 8 mg/K toxic
1383	Ethylamine-β-chloro-di(p-chlorobenzyl) . HCl	N		2/5	175	-2.5 / -1.5	6	1	fresh daily suspension
1384	Ethylamine, β-chloro- . HCl	C	m. 144	0/5	700	-1.5 / -0.5	7	1	1 inj/day fresh daily
1385	2-Ethyleneimino-4,6-bis dimethylamino-s-triazine	M		0/5	5	-1.0 / -2.0	7	1	fresh daily 1 mg/K toxic
1386	p-Methoxydibenzyl-β-chlorethylamine . HCl	J		2/5	32	+1.5 / -1.0	13	3	62 mg/K toxic
1387	N(p-Methoxy phenylisopropyl)-N-benzyl-β-chlorethyl-amine . HCl	J		1/5	4	+1.0 / +1.0	13	4	6 mg/K toxic
1388	N-(β-Phenylisopropyl)-N-ethyl-β-chloro-ethylamine . HCl	J		0/5	8	0.0 / +0.5	7	1	fresh daily 16 mg/K toxic
1389	Piperidine, 1-(β-chloroethyl)-	A		0/5	25	-2.0 / +1.0	13	1	75 mg/K toxic
1390	N, N, N', N'-/Tetrakis(β-chlorethyl) decamethylene diamine/. 2 HCl	D		0/5		-1.5 / -0.5	7	1	1 inj/day fresh daily (suspension) 2 mg/K toxic
	NITRILES:								
1391	Acetophenone cyanohydrin	AP		1/10	500	-2.5 / -3.0	7	5	
1392	Amygdalin	D		0/5	750	-0.5 / -1.5	13	1	
1393	β-Chloropropionitrile	AP		0/5	63	-2.0 / -1.5	13	4	125 mg/K toxic
1394	3-Cyanoacetyl diphenylene oxide	E		1/5	400	-1.0 / -0.5	11	2	
1395	p-Cyanobenzene arsonic acid	C		0/5	25	-1.5 / +1.0	13	1	50 mg/K toxic
1396	p-Cyanobenzoic acid	C		0/5	500	0.0 / -0.5	13	2	

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1397	β-Cyanoethyl isopropyl ether	AP		2/5	750	-1.5 / -1.0	7	4	
1398	2-Cyano bicyclo [2.2.1]-5-heptene	AP		0/5	9	-0.5 / -0.5	7	5	1 inj/day 20 mg/K toxic
1399	9,9-di(β-Cyanoethyl) perhydrofluorene	AP		0/5	200	-0.5 / +0.5	7	5	300 mg/K toxic
1400	Bis (5-Cyano-3-pentenyl) ether	EC		0/5	5	-0.5 / -2.5	7	4	10 mg/K toxic
1401	tris (1-Cyano-3,5,5-trimethyl hexyl) phosphite	EC		2/5	200	+0.5 / -2.0	6	5	
1402	4,4-Dicyanocyclohexene	AA		0/5	30	-1.0 / 0.0	7	4	60 mg/K toxic
1403	2,5-Dimethylbenzylmalononitrile	AA		1/5	30	-0.5 / -1.5	13	2	66 mg/K toxic
1404	Fluorene nitrile	F	m. 85	2/10	500	0.0 / +1.0	13	3	
1405	Glutaronitrile	AP		0/5	16	-1.0 / -1.5	7	5	1 inj/day 32 mg/K toxic
1406	Lactonitrile	M		2/5	20	-0.5 / -1.0	5	4	
1407	β-Methoxyadiponitrile	Q		4/15	500	-2.0 / -1.0	6	4	
1408	o-Methoxybenzoylacetonitrile	M		2/5	16	+4.0 / +3.5	11	3	
1409	p-Methyl cinnamonitrile	E		0/5	75	+1.0 / -1.0	13	2	130 mg/K toxic
1410	Pentaacetyl-d-gluconononitrile	AW5		0/5	63	-1.5 / -1.5	12	4	2 inj/day 125 mg/K toxic
1411	β-Phenoxy propionitrile	M		0/5	300	-2.5 / -1.0	7	4	500 mg/K toxic
1412	Phenyl acetonitrile	M		2/5	4	+2.0 / +1.0	11	3	8 mg/K toxic

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1413	Sebaconitrile	AP		2/10	65	-1.0 -2.5	7	5	1 inj/day 125 mg/K toxic
1414	Sodium salt of hydroxymethylene malononitrile	AW5		2/10	500	-0.5 +0.5	13	1	
1415	Succinonitrile	M1		0/5	10	-1.0 -1.5	13	1	20 mg/K toxic
1416	2-Thenylmalononitrile	AA		1/5	20	-1.0 +0.5	12	2	66 mg/K toxic
1417	β,β-Thiodipropionitrile	M		2/5	600	-1.0 -0.5	6	4	
1418	2,4,6-Trimethylbenzylmalononitrile	AA		2/5	200	-1.5 +2.0	13	2	
	NITRO COMPOUNDS:								
1419	2-Acetamido-6-chloro-1-methyl-3-nitrobenzene	E		2/5	750	-4.0 -2.0	7	4	
1420	5-Amino-4-carbethoxy-1-p-nitrophenyl-v-triazole	BL		3/10	500	+0.5 0.0	13	2	
1421	p-Anisidine, N-(α,α,α-trifluoro-2-nitro-p-tolyl)-	CI		0/5	700	-2.0 -0.5	7	5	1 inj/day
1422	o-Anisidine-N-(α,α,α-trifluoro-2-nitro-p-tolyl)-	CI		0/5	700	-0.5 -0.5	7	5	1 inj/day
1423	Benzoyl-p-nitro aniline	AN		0/5	750	0.0 +0.5	13	2	
1424	Biphenyl, 4-bromo-4'-nitro-	CI		0/5	600	0.0 +0.5	13	2	
1425	5-Bromo-1-nitronaphthalene	E		0/5	600	-0.5 +0.5	13	2	
1426	Carbazole, 9-ethyl-3-nitro-	CI		0/10	500	-3.0 -3.5	6	5	
1427	Carbazole, 3-nitro-	CI		0/5	700	-1.5 -0.5	13	3	

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1428	2-Chloro-6-nitrobenzothiazole	AA		2/5	500	-5.5 / -1.0	10	2	also negative in gum acacia
1429	4-Chloro-4'-nitro diphenyl ether	D		2/10	500	-1.0 / -1.5	7	5	
1430	bis (4-Chloro-2-nitrophenyl) disulfide	C ; EC		0/5	750	+0.5 / +0.5	13	2	
1431	2-Chloro-4-nitrotoluene	CG		0/5	750	+1.0 / +0.5	13	2	
1432	1-Cyano-5-nitro naphthalene	E		2/5	600	-0.5 / +0.5	12	2	
1433	2,4-Diamino-6-p-nitrocinnamoyl-s-triazine	M	m. 273	2/5	600	-2.0 / -0.5	12	2	
1434	Dibenzofuran, 3-nitro-	CI		0/5	300	-1.5 / -0.5	13	3	500 mg/K toxic
1435	1,3-Dichloro-4,6-dinitrobenzene	CI		1/5	125	-2.5 / -0.5	13	2	160 mg/K toxic
1436	1,3-Dichloro-4-nitrobenzene	CI		2/10	16	-1.5 / -2.5	13	6	
1437	α^1,α^3-Dichloro-5-nitrohemimellitene	CI		1/5	200	0.0 / +0.5	13	2	300 mg/K toxic
1438	4,4'-Dimethoxy-3,3'-dinitrobenzophenone	C ; EC		0/5	500	+1.0 / +1.5	13	2	
1439	3,4-Dimethyl-6-nitro aniline	BL		2/5	700	-1.5 / 0.0	13	2	
1440	O,O-Dimethyl-O-p-nitrophenyl thiophosphate	EM		0/5	5	-2.0 / -2.0	13	6	10 mg/K toxic
1441	2,4-Dinitro-4'-chlorodiphenyl ether	BE		0/5	750	+1.5 / -0.5	13	2	
1442	2,4-Dinitro-6-sulfo-phenol, potassium salt	E		0/5	700	-1.5 / -1.5	13	1	
1443	2,4-Dinitrophenyl acetic acid	C		1/5	750	0.0 / +0.5	13	2	

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1444	N, N'-bis (2, 4-Dinitrophenyl) cystine, L-form	C		0/5	700	0.0 / +0.5	13	1	
1445	4, 4'-Dinitrostilbene	E		0/5	600	0.0 / 0.0	13	2	
1446	1, 1-Diphenyl-2-nitropropane	D2		0/5	500	+2.0 / 0.0	13	2	
1447	N-Ethyl-p-nitroaniline	C1		1/5	750	-1.0 / -0.5	13	2	
1448	Fluorene, 2, 5-dinitro-	F	m. 208	1/5	150	+3.5 / +1.5	11	3	250 mg/K toxic
1449	Fluorene, 8-nitro-2-benzoyl-	F	m. 208	0/5	500	+3.0 / +1.0	13	3	
1450	Fluorenone, 2-nitro-	F	m. 217	4/10	500	+0.5 / -1.5	13	3	
1451	Formanilide, N-methyl-p-nitro-	CI		0/5	500	0.0 / +0.5	13	2	also negative in gum acacia
1452	Furadroxyl . 5-nitro-2-furaldehyde-2 (2'-hydroxy ethyl semicarbazone)	P		4/15	50	-1.0 / -1.0	13	3	also negative in saline
1453	4-β-Hydroxyethoxy-3-nitro-benzenearsonic acid	C		1/5	500	-1.5 / -1.0	8	1	
1454	5-Iodo-α-nitronaphthalene	E		0/5	600	-0.5 / +0.5	13	2	
1455	bis (4-Methoxy-3-nitrophenyl) methane	C		1/5	500	-0.5 / +1.5	13	2	
1456	2-Methyl-2-nitro propylene glycol	AP		0/5	750	-1.5 / 0.0	13	1	
1457	p-Nitroacetophenone	CG		2/5	750	+1.0 / +1.0	13	2	
1458	m-Nitroacetophenone	C ; CG		1/5	500	-2.0 / -1.0	12	2	also negative in gum acacia
1459	Nitro amino diphenyl sulfide	AN		2/5	200	-2.0 / -0.5	9	2	500 mg/K toxic

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1460	2-p-Nitroanilino ethanol	CI		0/5	600	-1.0 / -0.5	13	2	
1461	1-Nitro-2-p-anisyl ethene	DQ		0/5	16	-2.0 / -2.0	7	5	32 mg/K toxic
1462	m-Nitrobenzaldehyde thiosemicarbazone	BE		2/5	250	+1.0 / +1.0	13	2	
1463	4-Nitrobenzenearsonic acid, sodium salt	C		0/5	32	-2.0 / +0.5	11	1	50 mg/K toxic
1464	p-Nitrobenzoic acid	AN		2/5	125	+2.5 / -0.5	13	3	250 mg/K toxic
1465	8-Nitro-5,6-benzoquinaldine	AN		0/5	500	-1.0 / -0.5	13	2	
1466	2-(4-Nitrobenzoylamino) diphenyl	CI		0/5	600	+0.5 / +0.5	13	2	
1467	N-(4-Nitrobenzoyl)-L-(+)-glutamic acid	G		0/5	750	0.0 / +1.0	13	1	
1468	N-(3-Nitrobenzoyl)-L-(+)-glutamic acid	G		0/5	250	0.0 / +1.0	13	4	500 mg/K toxic
1469	m-Nitro-chlorobenzene	AN		2/5	200	-1.0 / -0.5	12	2	
1470	2-Nitro-2-chloro-1-butyl phosphate	AR		0/5	500	-1.0 / +1.5	7	4	1 inj/day
1471	2-Nitro-2-chloropropanol	AR		0/5	75	-1.5 / -0.5	7	4	1 inj/day 150 mg/K toxic
1472	5-Nitro-6-chloroquinaldine	AN		0/5	500	-1.5 / 0.0	12	2	750 mg/K toxic
1473	3-Nitro-6,7-dimethoxy-9 (2-hydroxy-3-diethylamino propyl-H amino) acridine .2HCl			0/5	4	+4.5 / -1.5	13	3	8 mg/K toxic in gum acacia; 6 mg/K toxic in CMC
1474	2-Nitrofluorene	F	m.157	4/10	500	0.0 / +1.0	13	3	

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1475	3-Nitro-4-hydroxybenzenearsonic acid	C		1/5	63	+5.0 / +0.5	13	3	122 mg/K toxic
1476	5-Nitroindazole	D		1/5	300	+2.0 / 0.0	13	3	500 mg/K toxic
1477	1-Nitro-3-methyl-1-butene	AR		0/5	8	-1.0 / -1.5	7	5	1 inj/day 12 mg/K toxic
1478	α-Nitronaphthalene	AN		0/5	125	+5.0 / +3.5	13	3	250 mg/K toxic
1479	N-(p-Nitrophenacyl) acetamide	C		2/10	500	-0.5 / +0.5	13	2	
1480	N-(p-Nitrophenacyl) propionamide	C		1/5	125	+2.5 / +3.0	13	3	250 mg/K toxic
1481	2,2'-bis (p-Nitrophenoxy) isopropylamine	C		1/5	700	-0.5 / +1.5	13	2	
1482	p-Nitrophenylacetonitrile	M		1/5	8	-0.5 / 0.0	7	5	1 inj/day 10 mg/K toxic
1483	β-(p-Nitrophenyl) alanine, DL form	C		1/5	32	+4.5 / +3.0	13	3	
1484	1,1-bis (p-Nitrophenyl) 2-aminopropane	D2		0/5	60	0.0 / 0.0	13	2	100 mg/K toxic
1485	bis (p-Nitrophenyl) disulfide	C		1/5	500	0.0 / +1.5	13	2	
1486	m-Nitrophenyl hydrazine HCl	AN		0/5	100	-1.5 / -1.5	13	2	200 mg/K toxic
1487	β,β'-bis (p-Nitrophenyl) isobutyric acid	C		0/5	500	-0.5 / -0.5	13	3	750 mg/K toxic in CMC
1488	1-p-Nitrophenyl-3-methyl-5-benzoxypyrazole	E		0/10	500	-1.0 / -1.0	13	2	
1489	1,1-bis (p-Nitrophenyl) 2-nitropropane	D2		1/5	500	0.0 / 0.0	12	2	
1490	1-(p-Nitrophenyl)-5-oxo-Δ^2-1,2,4-triazoline-3-carboxylic acid, ethyl ester	C		1/5	700	-0.5 / +2.5	13	2	

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1491	2-Nitro-1-phenyl-1-propene	AR		0/5	12	-2.0 / -1.5	7	4	1 inj/day 24 mg/K toxic
1492	o-Nitrophenyl pyruvic acid	C		0/5	65	-2.0 / -1.0	7	4	100 mg/K toxic
1493	N-(o-Nitrophenyl) succinimide	AR		2/10	500	-2.0 / -0.5	13	2	
1494	N-(m-Nitrophenyl) succinimide	AR		2/5	600	-3.0 / -0.5	10	2	
1495	N-(p-Nitrophenyl) succinimide	AR		1/5	600	-1.0 / -0.5	13	2	
1496	m-Nitropropiophenone	CG		1/5	750	+2.0 / +1.0	13	2	
1497	2-(p-Nitrostyryl) pyridine methiodide	CY		1/5	25	-1.5 / -0.5	12	2	
1498	4-(p-Nitrostyryl) quinoline	M		1/5	700	+0.5 / +1.0	13	2	
1499	4-Nitro-p-terphenyl	E		1/5	600	-2.0 / +1.5	13	2	
1500	5-Nitro-2-thenylidenemalononitrile	L		0/5	25	-1.5 / +1.5	13	2	35 mg/K toxic
1501	5-Nitrotoluene-3-sulfonic acid	CI		0/5	750	-1.0 / -1.5	13	1	
1502	p-Phenetidine, N-(α,α,α-trifluoro-2-nitro-p-tolyl)-	CI		0/5	700	-5.0 / -0.5	7	5	1 inj/day
1503	o-Phenetidine, N-(α,α,α-trifluoro-2-nitro-p-tolyl)-	CI		0/5	700	-3.5 / -0.5	7	5	1 inj/day
1504	Phenol, o,o'-methylene bis(p-nitro)-	CI		0/5	500	+0.5 / +0.5	13	2	
1505	1-Phenoxy-3-chloro-6-nitrobenzene	E		0/5	700	0.0 / -0.5	13	2	
1506	Piperonal, 6-nitro-	CI		0/5	500	+0.5 / +0.5	13	2	also negative in gum acacia

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1507	2,3-Pyrrolidinedione, 1-(o-hydroxyphenyl)-5-(m-nitrophenyl)-	CI		0/5	500	-0.5 / -0.5	13	2	
1508	Sulfanilic acid, 2-anilino-N-4-(2-hydroxyethyl)-5-nitro-, potassium salt	CI		0/5	500	+1.0 / +2.5	13	2	
1509	Sulfanilic acid, 2-chloro-N-4-(2-hydroxyethyl)-5-nitro-, potassium salt	CI		0/5	500	0.0 / +0.5	13	2	
1510	N, N'-(2,2,2-Trichloroethylidene) bis-(p-nitro aniline)	C		1/5	750	+1.0 / +2.0	13	2	
1511	Triethyl-P'-p-nitrophenyl-P'-thionopyrophosphate	DB		0/5	1	-3.0 / -1.5	7	4	2 mg/K toxic
	PENICILLIN DERIVATIVES:								
1512	S-Benzyl penicillamine (L)	BY		0/5	600	-0.5 / -1.0	13	1	
1513	Benzylpenillic acid	BY		0/5	600	0.0 / -1.0	13	1	
1514	N-Methyl L -penicillamine disulfide	BY		0/5	500	-2.0 / +1.0	13	1	
1515	DL-Penicillamine	AW5		1/5	125	+0.5 / +0.5	12	1	200 mg/K toxic
	PTERIDINES:								
1516	2-Amino-4,6-dihydroxy-7,8-dihydropteridine	W		1/5	300	-5.0 / -2.5	13	3	300 mg/K toxic in CMC
1517	2-Amino-4-hydroxy-6,7-diphenyl pteridine	BA		1/10	500	+3.0 / +0.5	13	3	
1518	2-Amino-4-hydroxypteridine-6-carboxylic acid	M		1/5	100	-1.5 / -1.0	11	3	200 mg/K toxic in CMC
1519	2-Amino-4-hydroxy-6,7-bis (p-sulfinomethylamino-phenyl) pteridine, disodium salt	BA		0/10	500	-0.5 / -0.5	12	1	
1520	2,4-Diamino-6,7-bis (4-amino phenyl) pteridine	BA		1/5	600	+3.5 / +3.0	13	3	
1521	2,4-Diamino-6,7-dihydroxypteridine	BE		2/10	500	+2.0 / -1.0	13	3	

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1522	2,4-Diamino-6,7-dimethyl pteridine	BA		2/5	50	-1.5 / 0.0	10	2	also negative in gum acacia
1523	2,4-Diamino-6,7-diphenyl pteridine	C		1/10	512	+4.5 / +2.5	13	3	
1524	2,4-Diamino-6-methylpteridine	M		0/5	250	-4.0 / -2.0	13	2	greater toxicity in gum acacia
1525	2,4-Diaminophenanthro-/9,10-e/ pteridine	BA		3/10	500	-3.0 / +0.5	13	3	
1526	2,4-Diamino-6,7-bis (p-sulfinomethylaminophenyl) pteridine, sodium salt	BA		0/5	1000	-1.0 / -0.5	13	1	
1527	Dihydro-2,4-diamino-7-hydroxy-pteridine-6-carboxylic acid . H_2O	BE		2/5	75	-1.5 / +1.0	12	2	
1528	2-Mercapto-4-amino-6,7-dimethylpteridine	BA		1/5	500	-2.0 / -2.0	12	2	
1529	2-Methylamino-4-amino-6,7-diphenylpteridine	BA		2/10	300	-0.5 / -2.0	13	2	500 mg/K toxic in gum acacia
1530	2-Methylamino-4-hydroxy-6,7-dimethyl pteridine	BA		2/5	80	0.0 / -0.5	12	2	125 mg/K toxic
1531	10-Phenyl-isoalloxazine	D		0/5	20	-1.5 / -1.5	13	2	40 mg/K toxic
	PURINES:								
1532	7-/α-Acetic acid/ theophylline	AQ	m. 272	1/5	500	-2.0 / +2.0	13	2	
1533	Adenine	BC		5/10	350	+1.0 / +1.5	13	3	
1534	α-(Adenine-9)-α'-hydroxymethyldiglycollicdialdehyde	AW6		2/5	20	-0.5 / +1.5	13	2	35 mg/K toxic
1535	Adenosine-5-phosphoric acid			0/5	250	0.0 / -0.5	13	1	500 mg/K toxic
1536	2-Amino-6-chloro-8-(2',4'-dichlorophenyl) purine	BE		2/5	250	+2.0 / -0.5	11	3	500 mg/K toxic

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1537	2-Amino-6,8-Dihydroxypurine	BE		0/5	500	-3.0 / 0.0	13	2	
1538	2-Benzylthio-6-aminopurine . H_2O	BE		0/5	500	+1.5 / 0.0	13	2	
1539	1,2-Butenyl theobromine	L		1/10	75	-2.5 / -2.0	7	4	1 inj/day 150 mg/K toxic
1540	6-Butylaminopurine	BE		2/5	125	-2.0 / 0.0	12	3	
1541	2-Chloro-6-amino-8-hydroxypurine	BE		0/5	50	-2.5 / -1.5	13	3	100 mg/K toxic in CMC
1542	8-Chloro caffeine	C		0/5	128	+6.0 / +2.5	13	3	200 mg/K toxic
1543	2-Chloro-6-hydroxy-7-methylpurine	BE		3/10	500	+1.5 / +0.5	13	3	
1544	2-Chloro-6-mercapto-7-methylpurine	BE		0/5	750	+0.5 / -0.5	13	2	
1545	6-Decyl aminopurine	BE		1/5	200	-0.5 / +2.5	13	2	400 mg/K toxic
1546	2,6-Diamino-8-p-methylcarboxy phenyl purine . HCl . H_2O	BE		1/5	63	+3.5 / +0.5	13	3	125 mg/K toxic
1547	2,6-Diamino-8-p-nitrophenylpurine	BE		3/10	500	+1.5 / 0.0	13	3	
1548	2,6-Diamino-9-β-d-ribofuranosylpurine	AW6		0/5	500	-2.5 / 0.0	13	2	also negative in gum acacia
1549	7-[α-(Dibenzylaminoethyl acetate)] theophylline . HCl	AQ	m. 198	0/10	500	-1.0 / -1.0	13	1	heated
1550	7-Dibenzylaminoethyl theophylline . 2 HCl	AQ		1/5	250	-1.5 / -0.5	12	1	500 mg/K toxic
1551	2,6-Dichloro-8-hydroxypurine	BE		2/10	125	+2.5 / -0.5	10	3	150 mg/K toxic
1552	2,6-Dichloro-7-methylpurine	BE		2/5	30	+5.0 / +3.5	13	3	63 mg/K toxic

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1553	7-/α-(Diethyl acetamide)/ theophylline	AQ	m. 186	0/5	600	-2.5 / -1.5	13	1	
1554	7-/α-(Diethylaminoethyl acetate)/ theophylline hydrochloride	AQ	b. 182	0/5	600	-1.5 / 0.0	13	1	
1555	7-/α-(Diethyl aminopropyl acetate)/ theophylline hydrochloride	AQ	m. 198	2/5	700	-1.0 / 0.0	12	1	
1556	2,6-Dimercaptopurine	BE		0/5	750	-1.5 / 0.0	9	2	
1557	6-Dimethyl aminopurine	BE		1/15	50	-2.0 / -1.5	13	1	100 mg/K toxic
1558	Dithiohydroxy purine	BE		0/5	750	-1.5 / -0.5	13	2	
1559	7-/α-(p-Ethoxy acetanilide)/ theophylline	AQ		2/10	500	-1.0 / +1.0	9	2	
1560	1-Ethyltheobromine	L		3/10	100	-2.0 / -0.5	7	4	1 inj/day 300 mg/K toxic
1561	Mercurophylline	DJ		0/5	175	-0.5 / -2.0	13	1	300 mg/K toxic
1562	8-Methyl xanthine	BE		0/5	150	-0.5 / 0.0	13	3	250 mg/K toxic
1563	7-/α-3-Oxapentamethylene acetamide/ theophylline	AQ	m. 188	0/5	600	-2.5 / -2.0	13	1	
1564	7-/α-Pentamethylene acetamide/ theophylline	AQ	m. 183	0/5	700	0.0 / -2.0	12	1	
1565	7-/β-Propionic acid/ theophylline	AQ	m. 105	0/5	500	-0.5 / +2.0	13	2	
1566	2,6,8-Triaminopurine	BE		1/5	65	+1.0 / -2.0	13	3	125 mg/K toxic
1567	Xanthine	BC		1/10	500	+2.5 / -0.5	7	2	

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	PYRIMIDINES:.								
1568	2-Amino-4-anilino-5-bromo-6-methyl pyrimidine	BE		0/5	750	0.0 / +1.0	13	2	
1569	2-Amino-4-anilino pyrimidine . HCl	C		2/5	63	+0.5 / +1.5	13	1	75 mg/K toxic
1570	2-Amino-4-p-bromoanilino-5-bromo-6-methyl pyrimidine	BE		1/5	750	-0.5 / +1.0	13	2	
1571	4-Amino-5-p-chlorophenylpyrimidine	BE		1/10	500	0.0 / 0.0	13	2	
1572	2-Amino-4-m-cyanoanilino-6-methyl pyrimidine	BE		3/10	35	0.0 / 0.0	13	3	
1573	2-Amino-4-(4'-dichloroarsenosoanilino)-pyrimidine . HCl	C		0/10	8	+1.0 / +1.5	11	1	16 mg/K toxic
1574	2-Amino-4-o-mercaptoanilino-6-methyl pyrimidine	BE		2/5	150	-2.0 / -1.5	10	1	
1575	3-Amino-2-mercapto-4, 6, 6-trimethylpyrimidine	AA		1/5	125	+1.0 / -0.5	12	3	200 mg/K toxic
1576	2-Amino-4-methylpyrimidine	M		0/5	750	0.0 / +1.0	13	1	
1577	Arabinopyranosylcytosine	CO		1/5	500	-1.0 / +0.5	13	2	also negative in gum acacia
1578	Barbituric acid	AM		0/5	600	+4.5 / +3.0	13	3	
1579	2-Benzalimino pyrimidine	C	m. 211	1/5	750	+3.5 / 0.0	13	3	
1580	2-Benzyl-4, 6-dimethylpyrimidine	AM		1/5	250	+6.5 / +2.0	13	3	500 mg/K toxic
1581	2-p-Bromoanilino-4, 6-dimethyl-5-bromopyrimidine	BE		0/5	750	0.0 / +1.0	13	2	
1582	1-Butyl-2-hendecyl-1, 4, 5, 6-tetrahydro pyrimidine	AE	b. 205 5 mm.	2/5	8	0.0 / +1.0	13	6	10 mg/K toxic

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1583	Cytidine			0/5	500	0.0 +0.5	13	2	
1584	Desoxyribonucleic acid			1/10	500	-1.5 -1.5	13	1	
1585	2,4-Diamino-5-p-chlorobenzyl-6-amyl pyrimidine hydrochloride	BE		2/5	140	-0.5 +2.5	11	2	
1586	2,4-Diamino-5-p-chlorophenyl-6-n-amyl pyrimidine	BE		0/5	700	-0.5 -0.5	13	2	
1587	2,4-Diamino-5-p-chlorophenoxy-6-ethyl pyrimidine	BE		1/5	350	0.0 +0.5	12	2	
1588	2,4-Diamino-5-(2',4'-dichlorobenzyl)-6-methyl pyrimidine	BE		1/5	300	-1.0 -1.0	13	2	
1589	2,4-Diamino-5-(3',4'-dichlorobenzyl)-6-methyl pyrimidine	BE		0/5	375	0.0 +1.5	13	2	500 mg/K toxic
1590	2,4-Diamino-5-(3',4'-dichlorophenyl)-6-methoxymethyl pyrimidine	BE		0/5	100	-1.0 -1.0	13	2	
1591	2,4-Diamino-5-(3',4'-dichlorophenyl)-6-phenyl pyrimidine	BE		0/5	700	-0.5 -0.5	13	2	
1592	5,7-Diamino-1,2-dihydrofurano (2,3-d) pyrimidine	BE		0/5	500	-1.0 -0.5	13	1	
1593	2,4-Diamino-5-(3',4'-dimethoxy benzyl) pyrimidine	BE		1/5	700	+1.0 +0.5	10	2	
1594	2,4-Diamino-5-β-hydroxyethyl-6-hydroxy pyrimidine	BE		2/5	400	-3.0 -1.0	10	2	500 mg/K toxic
1595	2,4-Diamino-5-lauryloxypyrimidine . HCl	BE		0/5	400	-1.5 +0.5	11	2	500 mg/K toxic
1596	2,4-Diamino-5-p-nitrophenoxy-6-methyl pyrimidine	BE		2/10	500	+0.5 +0.5	13	2	700 mg/K toxic in CMC
1597	2,4-Diamino-6-phenyl pyrimidine	BE		0/5	150	-2.5 -1.5	13	1	300 mg/K toxic
1598	1,3-Dibutyl-2,6-diketo-4-amino pyrimidine	CC		1/5	150	-1.0 0.0	13	4	2 inj/day 250 mg/K toxic

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1599	2,6-Dichloro-4-N-methylanilinopyrimidine	E		1/5	750	0.0 / -1.0	13	2	
1600	5-(3',4'-Dichlorophenyl) thiouracil	BE		1/10	500	0.0 / 0.0	13	2	
1601	2,4-Dichloro pyrimidine	AW7		0/5	250	-0.5 / -1.5	7	1	fresh daily (suspension) 400 mg/K toxic
1602	2,4-Di (diethylamino) pyrimidine	AW7		0/5	5	-1.5 / -1.5	7	5	1 inj/day 15 mg/K toxic 2 inj/day
1603	2,4-Dimethoxy-6-chloropyrimidine	BE		2/5	750	-1.0 / +1.0	12	2	
1604	2,4-Dimethyl-6-anilinopyrimidine	BE		0/5	140	-1.0 / 0.0	10	2	
1605	2,4-Dimethyl-6-p-bromoanilino pyrimidine	BE		0/5	600	-1.0 / 0.0	12	2	
1606	2,4-Dimethyl-5-bromo-6-chloropyrimidine	BE		0/5	200	+1.0 / +1.5	13	2	400 mg/K toxic
1607	4,5-Dimethylthiazolino [2,3-b]-6-keto-tetrahydro-Δ^1-pyrimidine	AA		1/10	500	-1.5 / -0.5	13	1	
1608	2,6-Dimethyl-4-thioureido pyrimidine	AM		1/5	250	+7.5 / +2.0	13	3	500 mg/K toxic
1609	2,4-Dimorpholinyl pyrimidine	AW7		0/5	250	-3.0 / -1.5	13	4	2 inj/day 350 mg/K toxic
1610	2,4-Dipiperidylpyrimidine	AW7		1/5	32	-2.0 / -1.5	11	4	50 mg/K toxic
1611	Galactopyranosylcytosine . HCl	CO		0/5	750	-2.0 / 0.0	13	1	
1612	5-Glucosidamino uracil	BE		0/5	600	0.0 / +0.5	13	1	
1613	4-Hydroxy-5-ethyl-6-methyl-1,3,3A,7-tetra aza indene	E		0/5	250	+1.0 / 0.0	13	2	500 mg/K toxic

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1614	2-Imino-4,6-diketo-5-ethylcarboxyaminoacetylamino pyrimidine .1/2 H_2O	W		2/5	500	+2.5 / +0.5	13	3	
1615	2-Mercapto-4,6,6-trimethyl dihydropyrimidine	AA		2/5	400	-1.0 / -0.5	12	2	
1616	5-Methyl dithiouracil	BE		0/5	500	-0.5 / 0.0	13	2	
1617	2-Methylmercapto-4,6-diaminopyrimidine	BA		0/5	125	+3.0 / -2.0	13	3	2 inj/day 250 mg/K toxic
1618	3-Methyl uridine	ZA		0/5	600	-1.5 / -0.5	13	1	
1619	5-Nitro-1,3-dibenzyl-5-ethyl hexahydropyrimidine	AR		1/5	400	+4.0 / +3.5	13	3	500 mg/K toxic
1620	Orotic acid	D1		2/5	400	-1.0 / +1.5	12	2	
1621	Polymer from 2,4-bis ethyleneimino-6-chloropyrimidine	BE		0/10	500	0.0 / +1.0	13	2	fresh daily
1622	Propionic acid, β-(4-amino-6-oxo-2-pyrimidyl) mercapto-	AE		0/5	700	+3.0 / +1.0	13	3	
1623	2-Thiothymine	D		1/5	1000	+3.5 / 0.0	13	3	
1624	2,4,6-Triketo-5-aminopyrimidine	W		2/5	175	+4.0 / +1.5	13	3	250 mg/K toxic
1625	Uridine	Purchased		0/5	750	-0.5 / -0.5	13	1	
1626	Xylopyranosylcytosine	CO		0/5	750	-2.5 / 0.0	13	1	
	SULFONES AND SULFONAMIDES:								
1627	3-(N^4-Acetylsulfanilamido) dibenzothiophene	CW		2/10	500	+0.5 / 0.0	12	3	
1628	N-(4-Aminobenzenesulfonyl)-L-(+)-glutamic acid	G		1/10	500	+1.0 / +1.5	13	1	

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1629	2-Amino-1-phenol-4-sulfonamide	AN		0/5	750	+1.0 / +0.5	13	2	
1630	Benzenesulfonamide, 3,4-di chloro-N-methyl-	CI		0/5	63	-0.5 / -1.0	13	4	2 inj/day 100 mg/K toxic
1631	Benzenesulfonamide, 2,4,5-trichloro-	CI		0/5	500	-1.5 / -0.5	13	2	
1632	4-Benzoylacetamido methane sulfonanilide	E		0/5	600	+0.5 / 0.0	13	2	
1633	Carbamic acid, benzenesulfonamide, ethyl ester	G		1/5	750	+1.5 / +1.0	12	3	
1634	N-Carbethoxysulfanilamide	M		0/5	500	-1.0 / +0.5	13	2	also negative in gum acacia
1635	bis (p-Carboxylmethoxyphenyl) sulfone	AP		0/5	500	+0.5 / -3.0	7	5	1 inj/day 600 mg/K toxic
1636	N, N'-di-p-Chlorobenzene-sulfonyl-p-phenylenediamine	D		2/5	600	0.0 / -2.0	10	3	
1637	N^4(3-Chloro-1,4-dihydro-1,4-dioxo-2-naphthyl)-N^1-2-thiazolylsulfanilamide, monosodium salt	C		1/5	750	-1.0 / -1.0	13	1	
1638	4-Chloro-2,5-dihydroxy diphenyl sulfone	AA	m. 204	0/5	750	+0.5 / +0.5	13	3	
1639	N-(β-Chloroethyl)-p-toluenesulfonamide	D		0/5	512	+0.5 / -1.5	13	1	also fresh daily
1640	N^1-N^1-bis (2-Cyanoethyl) metanilamide	CI		0/5	500	0.0 / -0.5	13	2	
1641	N, N-bis (2-Cyanoethyl)-2'-nitro-4-biphenyl sulfonamide	C		2/10	500	-1.0 / -1.0	13	4	
1642	Cyanoethyl sulfone	AM		1/10	500	-1.0 / 0.0	13	2	
1643	N^1 (2-Diethylaminophenyl) sulfanilamide	M		0/5	500	-2.5 / -1.5	13	1	
1644	N'-(2'-Dimethylaminophenyl) sulfanilamide	M		1/5	400	-0.5 / -0.5	7	5	

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1645	p-[4-Dimethylamino-2-(triphenylsilyl)-phenazo] benzene sulfonamide	C ; ZB		0/5	250	+1.0 / +1.5	9	3	500 mg/K toxic
1646	2,7-Disulfanilamidoxanthone	C		1/5	250	+3.5 / 0.0	12	3	500 mg/K toxic
1647	N^2-Ethyl-N^2,N^5-bis-sulfanilyl-2,5-diamino toluene	M		0/5	500	+2.5 / -0.5	13	2	also negative in gum acacia
1648	N-Ethyl-N-(phenyl-sulfonyl)-β-alanine	C		0/5	125	-1.0 / -2.0	13	4	250 mg/K toxic
1649	N^1,N^1-bis-2-Hydroxyethyl-N^4-sulfanilylsulfanilamide	M		0/5	750	-1.0 / -1.0	7	4	
1650	p-[2-Hydroxy-6-(tri-phenylsilyl)-1-naphthylazo] benzene-sulfonamide	C ; ZB		0/5	600	+1.0 / +1.5	13	2	
1651	Metachloridine	M2		1/5	500	-1.5 / -1.0	13	2	
1652	p-(Methane sulfonamide) acetanilide	E		0/5	700	+0.5 / 0.0	13	2	
1653	N-Methyl disulfanilamide	M		0/5	750	-0.5 / +0.5	13	2	
1654	Mixture of ortho and para xylene sulfonamides	AN		0/5	100	-1.0 / +1.0	7	4	1 inj/day 200 mg/K toxic
1655	N-[β-(4-Nitrophenyl) ethyl]-p-toluene sulfonamide	E		0/5	750	-1.5 / 0.0	13	2	
1656	o-Nitrophenyl-p-tolylsulfone	M		1/5	700	-1.5 / +0.5	13	2	
1657	Phenosulfazole tablets	M		2/5	1000	+1.5 / +1.0	13	3	
1658	N^1-Phenyl-N^4-acetylsulfanilamide	AW5		0/5	500	-0.5 / -0.5	13	2	also negative in gum acacia
1659	N^1-Phenylsulfanilamide	AW5		0/5	500	0.0 / -0.5	13	2	also negative in gum acacia
1660	N-(2-Pyrimidyl)-4-(5-amino-7-hydroxy-2-v-triazolo (d) pyrimid-2-yl)-benzene-sulfonamide H_2O	M	m. 300	1/5	125	+1.0 / +0.5	11	3	250 mg/K toxic

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1661	N^1-Sodium disulfanilamide	M		0/5	500	+2.5 / -0.5	13	2	also negative in gum acacia
1662	Sodium 2,5-bis-sulfanilamido benzene sulfonate	M		0/5	700	+1.5 / +3.5	7	4	
1663	Sodium N^4-sulfanilyl naphthionate	M		0/5	750	-1.5 / +0.5	13	2	
1664	3-Sulfanilamido-1,2,4-benzotriazine	D2		2/5	750	-1.5 / -0.5	13	2	
1665	6-Sulfanilamidocinchophen	M		1/5	500	0.0 / +3.0	13	1	
1666	2-Sulfanilamido-4,6-dimethyl-5-bromopyrimidine	CQ		1/5	750	-0.5 / +0.5	13	2	
1667	2-Sulfanilamido-4,6-dimethyl-5-chloropyrimidine	CQ		0/5	500	+1.5 / -0.5	13	2	also negative in gum acacia
1668	4,4'-bis-Sulfanilamidodiphenyl methane	M		1/5	700	-2.0 / -0.5	12	2	
1669	2-Sulfanilamidopyridine	M		0/5	700	+3.5 / +1.5	13	2	
1670	3-Sulfanilamido-2,5-dimethyl pyrazine	M	m. 230	0/5	250	+2.0 / +1.5	12	3	500 mg/K toxic
1671	2-Sulfanilamido-4,6-dimethyl pyrimidine	M		1/5	500	+0.5 / +0.5	13	2	
1672	2-Sulfanilamido-4-hydroxypteridine	M		1/5	350	+2.0 / -0.5	13	3	500 mg/K toxic
1673	2-Sulfanilamido-6-methylbenzothiazole	CQ		1/5	500	-0.5 / -0.5	13	2	also negative in gum acacia
1674	2-Sulfanilamido-4-methyl-5-bromopyrimidine	CQ		1/5	500	-1.5 / +0.5	13	2	also negative in gum acacia
1675	2-Sulfanilamido-6-methyl pyrazine	M	m. 258	2/5	500	-2.5 / +0.5	12	2	
1676	2-Sulfanilamido-4-methyl thiazole	M	m. 243	0/5	500	+0.5 / +0.5	13	2	also negative in gum acacia

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1677	2-Sulfanilamido-4-piperidinomethylthiazole	CQ		1/5	750	+0.5 / -0.5	13	2	
1678	2-Sulfanilamido pyrazine	M	m. 256	1/5	250	+3.5 / -0.5	12	3	500 mg/K toxic in gum acacia
1679	2-Sulfanilamido pyrimidine	M		0/10	500	+2.5 / 0.0	12	3	
1680	2-Sulfanilamido-4,5,6,7-tetrahydrobenzothiazole	CQ		0/5	750	-0.5 / -0.5	13	2	
1681	2-Sulfanilamido-1,3,4-thiadiazole	M	m. 223	0/5	500	-0.5 / +0.5	13	2	
1682	2-Sulfanilamido thiazole	M		0/5	250	+3.5 / -0.5	13	3	500 mg/K toxic in gum acacia
1683	Sulfone, 4-anilino-3-nitrophenyl methyl-	CI		0/5	700	-1.5 / -0.5	13	2	
1684	Sulfone, benzyl phenyl-		m. 146	0/5	600	0.0 / -1.0	13	3	
1685	Sulfone, 2-chloroethyl-p-nitrophenyl-		m. 127	1/5	2	+2.0 / -1.0	11	3	
1686	Sulfone, phenyl-p-tolyl-		m. 112	1/5	20	+2.0 / -1.0	7	3	50 mg/K toxic
1687	1,1'(Sulfonyldi-p-phenylene)-bis-(2,5-dimethyl-3-pyrrolecarboxylic acid), diethyl ester	C		0/5	600	0.0 / +0.5	12	2	
1688	1,1'-(Sulfonyldi-p-phenylene)-bis-(2,5-dimethyl-3,4-pyrroledicarboxylic acid), tetraethyl ester	C		0/5	600	-1.0 / +2.5	13	2	
1689	4-(p-Toluenesulfonylamino) benzoylacetanilide	AW5		0/5	500	-0.5 / -0.5	13	2	
	THIOUREAS:								
1690	S-Allylisothiourea	M		0/5	125	0.0 / +1.5	7	4	250 mg/K toxic
1691	N-Amyl thiuronium chloride of diethylene glycol	M		0/5	63	-0.5 / +2.5	13	4	125 mg/K toxic

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1692	Dibutyl thiourea	M		2/5	250	+5.0 +2.0	7	4	500 mg/K toxic
1693	S-(3,4-Dichlorobenzyl) thiuronium stearate	EC		0/5	150	0.0 +1.0	13	2	250 mg/K toxic
1694	N,N-Diethyl, N'-p-anilinophenyl, N'-phenyl thiourea	BP		3/10	500	0.0 -0.5	11	3	
1695	N,N-Diethyl-N'-bis (ethoxyethyl) thiourea	BP		1/5	250	-1.0 -1.5	11	5	2 inj/day 300 mg/K toxic
1696	Diheptylthiourea	M		2/5	150	-2.0 -1.0	6	4	1 inj/day 300 mg/K toxic
1697	Di (o-tolyl) thiourea	M		2/5	175	-2.0 -0.5	11	2	
1698	N,N'-Diphenylthiourea	M		0/5	500	-1.5 -0.5	13	3	1 test toxic at same level
1699	Cholestene-3 (S - thiuronium-p-toluene sulfonate)	DO	m. 233	0/5	500	+2.0 -1.0	12	2	
1700	N-n-Dodecyl thiuronium bromide of polyethylene glycol 200	M		1/5	40	-2.0 0.0	7	4	1 inj/day 100 mg/K toxic
1701	N-n-Dodecyl thiuronium bromide of polyethylene glycol 6000	M		0/5	250	-1.0 +1.0	13	4	500 mg/K toxic
1702	Ethyl isothiourea sulfate	M		1/10	500	-2.5 -1.0	10	1	
1703	N-Ethyl thiuronium chloride of diethylene glycol	M		0/5	250	0.0 +2.5	13	4	500 mg/K toxic
1704	Monophenylthiourea	M		1/5	32	-1.5 +1.5	7	4	50 mg/K toxic
1705	N,N'-Phenyl ethyl thiourea	E		3/10	125	-1.0 -1.5	7	4	200 mg/K toxic
1706	Thiuronium bromide of polyethylene glycol 300	M		0/5	150	-0.5 -1.0	7	4	200 mg/K toxic
1707	Thiuronium bromide of polyethylene glycol 1000	M		0/5	700	-3.0 -1.5	7	4	1 inj/day

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1708	Thiuronium bromide of polyethylene glycol 4000	M		0/5	600	-1.5 / -1.5	7	4	1 inj/day
1709	Thiuronium bromide of polyethylene glycol 6000	M		0/5	600	-2.5 / -1.5	7	4	1 inj/day
1710	N, N, N'-Trimethyl thiourea	M		0/10	500	0.0 / +1.5	13	1	
	UREAS AND ISOUREAS:								
1711	1,4-bis (Diethylcarbamyl)-2, 5-dimethyl-piperazine	M		0/5	200	-1.5 / 0.0	13	6	400 mg/K toxic
1712	Dimethoxymethyl urea	M		0/5	600	-2.0 / -1.5	13	1	
1713	bis 2,4-(1,1-Dimethyl ethylene imino carbamyl) toluene	EC		2/5	125	-3.5 / -2.0	7	4	150 mg/K toxic
1714	Dimethylol urea	M		0/5	700	-0.5 / -1.5	13	1	suspension
1715	Hexamethylene di-(N-ethanol urea)	M		3/10	500	-1.5 / -1.0	13	1	suspension
1716	1-Methyl-1-phenylurea	CI		0/5	500	-2.5 / -1.5	13	1	
1717	Toluene-2, 4-di-(N-ethanol urea)	M		1/10	500	-0.5 / -1.0	13	1	suspension
1718	(2, 2, 2-Trichloro-1-hydroxyethyl) urea	DN		0/5	250	-0.5 / -0.5	13	4	400 mg/K toxic
1719	1, 3-bis (2, 2, 2-Trichloro-1-hydroxyethyl) urea	DN		1/5	350	+3.5 / 0.0	12	3	500 mg/K toxic
1720	4-Ureido-6-methyl hexahydropyrimid-2-one	EC		2/5	300	-1.5 / -1.5	12	2	
1721	N-Vinyl-N-ethyl-O-ethylisourea	M		0/5	10	-0.5 / -1.0	7	4	1 inj/day 35 mg/K toxic
	MISCELLANEOUS:								
1722	2-Acetacetamino benzothiazole	E		0/5	300	+0.5 / +1.0	13	3	500 mg/K toxic in CMC

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1723	2-Acetamido-4,6-diamino-s-triazine	M		2/10	500	+0.5 / +0.5	13	3	
1724	3-Acetamino-3-carbethoxy-2-piperidone	W		0/5	700	-3.5 / -2.0	13	1	
1725	Acetic acid, 2,4-dichlorophenoxy-, inosityl hexaester	AE	m.97	1/10	512	+2.0 / -0.5	13	3	
1726	Acetic acid, trifluoro-	AE		0/5	10	-3.0 / -2.5	5	5	1 inj/day 25 mg/K toxic
1727	2-Acetoacetamino-4-(1-coumaronyl) thiazole	E		0/5	200	0.0 / +1.5	12	2	400 mg/K toxic
1728	2-Acetoacetamino-4-phenyl thiazole	E		1/5	750	0.0 / 0.0	13	2	
1729	Acetonyl acetone	BV		0/5	600	-3.0 / +2.5	7	5	1 inj/day
1730	2-Acetyl aminobiphenyl	M		3/10	500	-1.5 / 0.0	6	4	
1731	3-Acetylamino-4-hydroxybenzenearsonic acid	C		1/5	750	+2.0 / 0.0	13	3	
	" " (sodium salt)	C		0/5	750	+1.0 / +0.5	13	1	
1732	α-Acetyl-β-butyrolactone	AP		1/10	500	-2.5 / -3.0	7	4	
1733	1-Acetyl-5,6-dimethylbenzotriazole	BL		2/5	700	-2.0 / 0.0	13	2	
1734	Acetylene diol I	D		0/5	50	+3.0 / +2.0	13	4	125 mg/K toxic
1735	N-Acetyl-N-methyl anthranilic acid	C ; E		2/5	750	+2.5 / +0.5	13	2	
1736	4-Acetyl-o-terphenyl	E		0/5	600	-0.5 / 0.0	13	2	
1737	Acrolein di (sodium bisulfite)	M		0/5	750	-0.5 / +1.0	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1738	Acrylic acid, 2,3-dibromopropyl ester	AE	b.105 5.5 mm.	1/5	32	-0.5 / -2.5	5	5	1 inj/day 63 mg/K toxic
1739	Alantolactone, helenin	C		2/10	125	-2.5 / -2.0	6	4	
1740	Aleuritic acid	W		1/5	700	+1.0 / +1.0	13	2	
1741	2-Allylamino-4-diallylamino-6-chloro-s-triazine	C		1/5	250	+2.0 / +1.0	13	3	500 mg/K toxic
1742	Allyl chlorocarbonate	AA	b.43 65 mm.	0/5	8	-2.5 / 0.0	13	4	16 mg/K toxic
1743	1-(2-Allyl-4-cyclohexylphenoxy)-2-(2-chloro-ethoxy) ethane	CG		1/5	300	-1.5 / -2.0	6	5	
1744	2-(2-Allyl-4-cyclohexylphenoxy) ethanol	CG		0/5	125	-3.0 / -1.5	7	5	1 inj/day 250 mg/K toxic
1745	o-Allyl phenyl acrylate	I2		2/15	150	-2.5 / -3.0	6	5	
1746	N-Allyl-1,2,3,6-tetrahydrophthalimide	AP		0/5	100	-2.5 / -1.0	13	4	2 inj/day 150 mg/K toxic 1 inj/day
1747	Aluminum G salt	M		1/10	500	+2.0 / +1.5	13	1	
1748	Aluminium oxide			0/5	700	+0.5 / +1.0	13	2	
1749	Aluminum schaeffer salt			1/10	500	-1.0 / +1.0	11	4	2 inj/day
1750	9-Aminoacridine levulinate	AQ	m.166	0/5	20	+2.0 / -0.5	13	3	32 mg/K toxic
1751	4-Amino-N-amyl-naphthalimide	M		0/5	750	-2.0 / -2.0	13	2	
1752	2-Amino-4-butylamino-6-chloro-s-triazine	C		1/5	125	+0.5 / +0.5	12	3	250 mg/K toxic
1753	2-Amino-4-(1-coumaronyl) thiazole	E		1/5	300	-0.5 / 0.0	13	2	

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1754	2-Amino-4-cyclohexylamino-6-chloro-s-triazine	C		1/5	125	+4.0 / +1.0	13	3	250 mg/K toxic
1755	2-Amino-6-/(N, N-dibenzyl-β-amino) ethyl/ carboxy benzothiazole . HCl	DQ		1/5	100	+2.5 / 0.0	12	3	200 mg/K toxic
1756	2-Amino-4-dimethallylamino-6-chloro-s-triazine	C		0/5	250	+2.5 / +1.0	13	3	500 mg/K toxic
1757	2-Amino-4-p-diphenyl thiazole	E		0/5	750	-1.5 / 0.0	8	2	
1758	2,4-bis (2-Aminoethyl-amino)-6-chloro-s-triazine	C ; E		0/5	125	-0.5 / 0.0	13	3	250 mg/K toxic
1759	2-Amino-4-methyl-5-carbethoxy thiazole	E		1/5	100	-0.5 / -0.5	13	2	200 mg/K toxic
1760	N^2, N^2, N^4, N^6-tetrakis (Aminomethyl)-melamine	AE		2/10	256	+4.0 / +1.0	13	3	512 mg/K toxic in gum acacia; also negative in saline
1761	6-Amino-2-mercaptobenzothiazole	AA		0/5	500	-1.0 / -1.0	13	2	also negative in gum acacia
1762	Aminomethane sulfonic acid	EJ		0/5	700	-1.0 / -1.0	13	1	
1763	N-(5-Amino-2-methylbenzyl) pyrrolidone	CI		0/5	750	0.0 / +2.5	13	2	
1764	2-Amino-4-morpholino-6-chloro-s-triazine	C		1/5	300	+3.5 / 0.0	13	3	500 mg/K toxic
1765	2-Amino-5-oxalaminobenzene sulfonic acid	E		1/5	750	-1.0 / -1.5	11	1	suspension
1766	1-(p-Aminophenyl)-5-oxo-Δ^2, 1, 2, 4-triazoline-3-carboxylic acid, ethyl ester	C		0/5	600	+1.5 / +2.5	12	2	
1767	5-Amino-1-phenyl tetrazole	BL		1/5	700	-1.0 / 0.0	11	2	
1768	2-Amino-4-piperidino-6-chloro-s-triazine	C		0/10	500	0.0 / +0.5	13	3	

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1769	2-Amino-4-N-propylamino-6-chloro-s-triazine	C		0/5	125	-2.0 / -1.0	7	4	1 inj/day 250 mg/K toxic
1770	p-(2-Amino-4-pyrimidylamino) dithiobenzene arsonous acid, bis (carboxymethyl) ester, disodium salt	C		2/5	300	-1.0 / -1.0	10	3	500 mg/K toxic
1771	5-Amino tetrazole	BL		0/5	500	-1.0 / -0.5	13	2	also negative in gum acacia
1772	5-Aminotetrazol, silver salt	E		1/5	50	-2.0 / -1.0	11	2	
1773	Ammelide . HCl	Z		2/5	50	-2.0 / 0.0	12	2	
1774	Ammeline	M		3/10	256	-0.5 / +1.5	11	3	
1775	Ammoniated glycyrrhizin	S		0/5	750	-0.5 / -1.5	13	1	
1776	Ammino compound, succinic acid, α-alkenyl-, copper (II) mono salt	AE		0/5	65	+0.5 / 0.0	13	1	125 mg/K toxic
1777	2-Amyl-4,4-bis (hydroxymethyl)-2-oxazoline	AR		2/10	500	+2.5 / +3.0	13	1	
1778	2-Amyl-4-methyl-4-hydroxymethyl-2-oxazoline	AR		0/5	125	0.0 / +2.0	13	4	250 mg/K toxic
1779	o-Amylphenol	M		0/5	16	-1.0 / +1.5	7	4	32 mg/K toxic
1780	Anilinobenzothiazole	AA		1/5	700	-2.0 / -1.0	6	5	1 inj/day
1781	3-(Anilinomethylene) acetyl acetone	E		4/10	500	+1.0 / -1.0	11	2	
1782	Isamine blue	AN		1/5	200	-1.5 / -1.5	9	1	400 mg/K toxic
1783	p-Arsonobenzenesulfonic acid	C		2/5	24	+2.5 / -0.5	11	3	32 mg/K toxic
1784	4-Arsonophenoxyacetamide-N-methanol, sodium salt	C		0/5	750	0.0 / 0.0	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1785	Bismarsen. (bismuth arsphenamine sulfonate)	AE		1/5	62	+1.0 / +1.0	13	1	125 mg/K toxic
1786	Sorbic acid maleic anhydride adduct	AA		0/5	63	-1.5 / 0.0	13	4	125 mg/K toxic
1787	Aurine tricarboxylic acid (chrome violet GY)			0/5	50	+1.5 / -1.0	11	3	62 mg/K toxic
1788	Barium octadecylene decyl thionothiophosphate	AP		1/10	15	-2.0 / -2.5	6	5	35 mg/K toxic
1789	Benzaldehyde semicarbazone	BE		0/5	750	-0.5 / -1.5	13	2	
1790	N-[4-(2-Benzimidazolyl)-methyl]-aminobenzoic acid	G		2/5	300	+4.0 / +1.0	13	3	400 mg/K toxic
1791	Benzofuroxan	AN		0/5	65	-1.0 / 0.0	7	4	1 inj/day
1792	Benzoic acid, 2,4,6-trihydroxy-	AE		1/5	300	-0.5 / -0.5	13	4	2 inj/day 500 mg/K toxic
1793	2(3) Benzothiazolethione, 3-(N-phenylaminomethyl)-	AA		0/5	500	+1.0 / -1.5	11	3	750 mg/K toxic in CMC
1794	bis (Benzothiazolylthiomethyl)cyclohexylamine	AA		1/5	750	-1.0 / +0.5	13	2	
1795	4'-(Benzoyl acetamido)-3'-methoxy-3-amino-benzanilide	E		1/5	700	-0.5 / 0.0	13	2	
1796	ω-Benzoylacetanilide	AW5		1/5	500	0.0 / -0.5	13	2	also negative in gum acacia
1797	1-Benzoyl-5,6-dimethylbenzotriazole	BL		1/10	500	0.0 / -0.5	13	2	
1798	Benzylidene-4-hydroxyaniline	DN		1/5	600	-0.5 / -1.0	13	2	
1799	1-Benzyloxy-2-(2-chloroethoxy) ethane	CG		2/10	300	-2.0 / -1.5	7	5	
1800	α-Benzylsuccinic acid	C		1/10	500	-0.5 / -0.5	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1801	Bicyclo [2.2.1]-5-heptene-2,3-dicarboximide	C		2/5	350	-3.0 / -2.0	6	4	1 inj/day
1802	2-[5-Bicyclo-[2.2.1]-2-heptenyl]-4,6-diamino-s-triazine	EC		0/5	125	-2.0 / -2.0	13	2	200 mg/K toxic
1803	Biguanide neutral sulfate	M		2/5	512	+2.5 / +1.0	11	3	
1804	4-Biguanidino-3',5'-dimethyldiphenyl ether	H		2/10	8	-2.0 / -2.0	7	4	
1805	2-Biguanyl benzoic acid	M		0/5	63	+1.5 / +1.0	13	3	125 mg/K toxic
1806	1-Biguanyl-4-methoxy-2-benzene sulfonic acid	M		0/5	250	+3.0 / -1.5	13	3	500 mg/K toxic
1807	2-Biguanyl-4-methyl-5-chloro benzene sulfonic acid	M		0/5	250	+3.0 / +0.5	13	3	500 mg/K toxic
1808	1-Biguanyl naphthalene-7-sulfonic acid	M		0/5	750	-1.5 / -1.5	13	1	
1809	2-Biguanyl naphthalene-1-sulfonic acid	M		1/5	250	+4.5 / +1.0	13	3	500 mg/K toxic
1810	2-Biguanyl-1-naphthalene sulfonic acid, copper complex	M		0/5	125	+2.0 / +1.0	13	3	250 mg/K toxic
1811	2-Biguanyl naphthalene-8-sulfonic acid	M		2/5	63	+2.0 / 0.0	13	3	125 mg/K toxic
1812	N-2-Biphenylyl melamine . HCl	C		1/5	600	-1.0 / 0.0	13	2	
1813	1-(4-Biphenylyloxy)-2-(2-chloroethoxy) ethane	CG		1/5	500	-2.5 / -3.0	7	5	
1814	1,2-bis (3-Biphenylyloxy) ethane	CG		1/5	300	-0.5 / +0.5	11	2	
1815	1-(4-Biphenylyloxy)-2-(vinyloxy) ethane	CG		2/5	600	+2.0 / +1.0	13	2	
1816	Boric acid			0/5	1000	-2.5 / -1.5	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1817	p-Bromoacetophenone	C ; CG		0/5	500	-3.5 / -4.0	7	5	1 inj/day
1818	4-Bromobenzenearsonic acid	C		2/5	8	0.0 / +0.5	13	1	16 mg/K toxic
1819	p-Bromo-benzoic acid	C ; CG		0/5	65	+3.0 / -2.0	13	3	2 inj/day 125 mg/K toxic
1820	α-Bromocaproic acid	C		0/5	250	-1.5 / -1.5	13	1	400 mg/K toxic
1821	6-Bromo-3-(N, N-diethyl carbamyl) coumarin	AQ		3/10	500	+1.0 / -1.0	12	3	
1822	α-Bromoenanthic acid	C		2/5	15	-2.0 / -1.0	7	4	25 mg/K toxic
1823	(2-Bromoethyl) cyclohexane	CG		0/5	600	+1.0 / -0.5	13	6	
1824	5-Bromo-2-hydroxy-α, α'-m-xylenediol	CI		0/5	750	+0.5 / -0.5	13	2	
1825	5-Bromoisatin	C		1/5	500	-2.0 / -1.5	13	2	
1826	α-Bromo-p-methoxy-β-1-piperidyl propiophenone . HBr	C ; ZD		2/5	24	0.0 / -0.5	7	4	
1827	2-Bromopentane	CG		0/5	750	+0.5 / -0.5	13	6	
1828	1, 2-bis (p -Bromophenoxy) ethane	CG		0/5	700	-2.0 / -3.0	7	5	
1829	β-(p -Bromophenoxy) propionic acid	AA	m. 142	0/5	250	+0.5 / -0.5	13	3	500 mg/K toxic
1830	p-Bromophenyl-3-bromopropyl ether	CG		0/5	650	+0.5 / -0.5	13	6	
1831	p-Bromophenyl-3-chloropropyl ether	CG		1/5	600	+1.0 / +1.0	13	2	
1832	p-Bromophenyl glyoxal . H_2O	CY	m. 134	2/5	32	-2.0 / -2.0	6	4	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
1833	3-p-Bromophenyl-2-imino-5-methyloxazolidine	M		2/5	24	+0.5 / 0.0	13	2	
1834	m-Bromopropiophenone	CG		0/5	500	0.0 / 0.0	13	6	
1835	N-α-Bromopropylphthalimide	C		2/5	62	+1.0 / +2.5	13	3	125 mg/K toxic
1836	Butane phosphonic acid, 1-hydroxy-			0/5	150	-1.0 / -0.5	13	4	250 mg/K toxic
1837	2-Butanone, 4-(3,4-dihydro-2(1H)-isoquinolyl)-4-phenyl-, oxime	CA		2/5	500	-0.5 / +0.5	13	2	
1838	2-Butanone, 4-(3,4-dihydro-1(2H)-quinolyl)-3-(4-morpholinyl)-4-phenyl-	CA		1/5	500	-1.5 / +0.5	13	2	also negative in gum acacia
1839	bis 3,5-(Butoxymethyl)-4-oxo-tetrahydro-1,3,5-oxadiazine	EC		1/5	16	-3.0 / -1.5	6	4	50 mg/K toxic
1840	α-sec-Butyl caproic acid	CG		0/5	10	0.0 / -0.5	7	4	25 mg/K toxic
1841	1,2-bis(4-tert-Butyl-2-chlorophenoxy) ethane	CG		0/5	700	-0.5 / -1.5	7	5	
1842	4-tert-Butyl-2-chlorophenyl-2-chloroallyl ether	CG		0/5	750	+1.0 / -0.5	12	6	
1843	α-Butyl cyclohexane acetic acid	CG		0/5	10	-1.5 / -1.0	7	4	15 mg/K toxic
1844	tert-Butyl hydroperoxide	CJ		0/5	700	+0.5 / -1.5	13	1	
1845	2-(4-tert-Butyl-2,6-bis(α-methyl-benzyl) phenoxy) ethanol	CG		3/10	200	-5.0 / -1.0	6	5	1 inj/day
1846	2,4-di-tert-Butyl phenol	CG		0/5	250	-2.0 / +4.0	13	6	500 mg/K toxic
1847	1,2-bis-(p-tert-Butylphenoxy) ethane	CG		0/5	700	-3.5 / -3.0	7	5	
1848	2-(p-tert-Butylphenoxy) ethyl acetate	CG		0/5	250	-1.5 / -1.0	13	5	2 inj/day 500 mg/K toxic

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1849	p-tert-Butyl phenyl-2-chloroallyl ether	CG		0/5	750	0.0 / 0.0	13	6	
1850	p-tert-Butylphenyl-2-methylallyl ether	CG		0/5	700	0.0 / 0.0	13	6	
1851	5-tert-Butyl-2-thiophene carboxylic acid	C		1/5	125	+0.5 / -1.0	13	4	2 inj/day 175 mg/K toxic
1852	4-Butyryl-o-terphenyl	E		0/5	600	-1.5 / -1.5	13	2	
1853	Caffeic acid	CF	m. 195	1/10	500	-0.5 / +0.5	13	2	
1854	Calcium di (p-hexadecylphenyl) thionothiophosphate			0/5	50	-2.5 / -2.5	6	5	100 mg/K toxic
1855	Cantharidin	S	m. 215	0/5	0.5	+2.0 / +1.6	13	3	1 mg/K toxic
1856	1-Carbethoxy-5, 6-dimethyl benzotriazole	BL		2/5	500	-1.5 / +0.5	11	2	
1857	1-Carboxy-3-(2'-hydroxyphenyl)-8-sulfo-4-azaphenanthrene	E		0/5	600	-0.5 / -0.5	13	1	
1858	o-Chloroacetophenone	C ; CG		0/5	500	-3.0 / -4.0	7	5	1 inj/day
1859	2-Chloro-4-tert-amyl phenol ethyl ether	M		0/5	700	-2.0 / -4.0	13	6	
1860	β-(m-Chloroanilino)-α-cyano N-furfurylacrylamide	AW5		0/10	500	-1.0 / +1.5	13	3	
1861	o-Chloro benzoic acid	C		0/10	500	0.0 / +1.0	13	1	
1862	p-Chlorobenzoic acid	C ; CG		0/5	500	-1.0 / -1.0	12	2	
1863	p-(p-Chlorobenzoyl)-benzoic acid	AA	m. 252	2/5	500	-1.0 / -1.5	12	2	
1864	5-(o-Chlorobenzylidene)-3-trichloromethylthio-2, 4-thiazolidinedione	EC		1/5	500	-1.5 / 0.0	8	2	8/13 inj

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1865	4-Chloro-2-biphenylyl-2-methyl allyl ether	CG		0/5	250	0.0 / -1.0	13	6	500 mg/K toxic
1866	p-Chlorocapriphenone	CG		0/5	750	-1.0 / 0.0	13	6	
1867	p-Chlorocaprophenone	CG		0/5	750	+0.5 / 0.0	13	6	
1868	p-Chlorocaprylophenone	CG		0/5	750	+0.5 / 0.0	13	6	
1869	α-Chloro-2,5-cresotic acid	C ; EC		1/5	65	+1.0 / +0.5	13	2	135 mg/K toxic
1870	2-Chloro-1,4-di-nitrosobenzene	AP		2/5	350	0.0 / 0.0	11	2	
1871	1-(2-Chloroethoxy)-2-(p-cyclohexylphenoxy) ethane	CG		0/5	750	0.0 / -0.5	13	6	
1872	p-Chloroenanthophenone	CG		1/5	750	+0.5 / 0.0	13	6	
1873	p-Chloroisobutyrophenone	CG		0/5	750	-2.0 / 0.0	13	6	
1874	6-Chloro-2-mercaptobenzothiazole	AA		2/5	500	-2.0 / -1.0	13	2	also negative in gum acacia
1875	4-(Chloromethyl)-1,3-dioxolane	CI		0/5	20	-1.5 / -1.5	7	4	
1876	2-Chloromethylimidazoline . HCl	W		0/5	35	-2.0 / -2.5	11	1	
1877	3-Chloro-2-methylpropylphenyl ether	CG		0/5	750	+1.0 / -0.5	13	6	
1878	p-Chloropelargonophenone	CG		0/5	750	-1.0 / 0.0	13	6	
1879	bis (5-Chloro-3-pentenyl) ether	EC		2/5	175	-5.0 / -4.0	6	5	
1880	1,2-bis /2-(p-Chlorophenoxy) ethoxy/ethane	CG		0/5	500	-1.0 / -1.0	7	5	

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1881	bis /2-(p-Chlorophenoxy) ethyl/ ether	CG		0/5	700	0.0 -0.5	7	5	1 inj/day
1882	β-(p-Chlorophenoxy) propionic acid	AA	m. 132	1/5	300	+4.0 0.0	13	3	500 mg/K toxic
1883	α-Chloro-s-phenoxy-valeric acid	C		2/10	35	-1.5 -2.5	7	4	
1884	bis (p-Chlorophenyl) acetic acid	I	m. 164	2/5	64	+2.5 0.0	11	3	
1885	5-(4'-Chlorophenylamino)-9-dimethylaminobenzo (a) phenoxazonium chloride	M		0/5	750	+2.0 +1.5	13	2	
1886	N-(3-p-Chlorophenyl-4, 5-dimethylthiazolinyl)-4, 5-dimethylthiazolo-2-sulfenimide	AA		1/5	500	+1.0 -0.5	13	2	
1887	o-Chlorophenyl hydracrylate	AA	b. 80 0.3 mm.	0/5	125	0.0 +0.5	13	4	250 mg/K toxic
1888	p-Chlorophenyl hydracrylate	AA		0/5	50	-2.5 -1.5	13	4	100 mg/K toxic
1889	N-(m-Chlorophenyl) phthalimide	AR		3/10	500	-1.5 -0.5	11	2	
1890	N-(o-Chlorophenyl) phthalimide	AR		1/5	600	-3.0 -1.5	7	5	
1891	N-(p-Chlorophenyl) phthalimide	AR		1/5	700	-1.5 -0.5	13	2	
1892	N-(o-Chlorophenyl) succinimide	AR		0/10	500	-2.5 -1.0	7	5	1 inj/day
1893	N-(p-Chlorophenyl) succinimide	AR		2/10	63	+1.5 0.0	13	3	125 mg/K toxic 1 test fresh daily
1894	3-Chloro-1, 2-propanediol-diacetate ester	C		0/5	125	-0.5 +0.5	13	4	175 mg/K toxic
1895	N-Chlorosuccinimide	C		2/5	100	-2.5 -0.5	6	4	
1896	2-(5-Chloro-2-thenyl) amino lepidine	DQ		0/5	50	-0.5 -2.5	7	5	1 inj/day 100 mg/K toxic

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1897	4,4'-(2-Chlorotrimethylene) dimorpholine . 2HCl	C ; ZH		1/5	63	-0.5 / 0.0	7	1	1 inj/day, fresh 125 mg/K toxic
1898	1,1'-(2-Chlorotrimethylene) dipiperidine . 2HCl	C		0/5	63	0.0 / 0.0	7	1	1 inj/day, fresh 125 mg/K toxic
1899	Cinnamamide, α-cyano-p-dimethylamino-	CI		0/5	700	-0.5 / +0.5	13	2	
1900	Cinnamaldehyde (sodium bisulfite)	M		0/5	600	-0.5 / -0.5	13	1	
1901	Cinnamic acid, p-acetamido-α-cyano-, ethyl ester	CI		0/5	700	-0.5 / +0.5	13	2	
1902	Cinnamic acid, 2-(4-morpholinyl) ethyl ester . HCl	C		0/5	750	-0.5 / -0.5	13	1	
1903	Cinnamylideneacenaphthenone	H		0/5	500	0.0 / +0.5	11	2	also negative in gum acacia
1904	Citral geranialdehyde			0/5	150	0.0 / 0.0	11	6	2 tests 250 mg/K toxic and non-toxic
1905	Citral di (sodium bisulfite)	M		0/5	700	-1.5 / -1.5	13	1	
1906	Cochineal	D		0/5	250	+5.0 / +3.5	13	3	500 mg/K toxic
1907	Coffee tannin / Potassium chlorogenate + 1 molecule caffeine /	CF		2/5	400	+3.5 / -1.0	13	3	500 mg/K toxic
1908	2-(2-Crotonylthio)-Δ^1-imidazoline . HCl	EC		1/5	700	-3.0 / -2.5	13	1	
1909	Cupric dioctyl thionothiophosphate	AP		0/5	30	-3.5 / -2.0	7	5	75 mg/K toxic
1910	Cyanoacetamide			1/5	750	-0.5 / -1.5	13	1	
1911	o-Cyanobenzamide	C		1/5	250	+4.5 / +3.5	13	3	500 mg/K toxic
1912	2,4-bis / bis-(β-Cyanoethyl) amino / -6-phenyl-s-triazine	EC		0/5	750	-1.5 / 0.0	13	2	

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1913	bis (2-Cyanoethyl) sulfoxide	AM		0/5	750	0.0 +0.5	13	2	
1914	3-Cyanoglutarimide	AA		0/5	500	-0.5 +0.5	13	2	
1915	Cyclohexane caproic acid	CG		1/5	50	-2.5 -2.5	7	4	60 mg/K toxic
1916	1,2-Cyclohexanedicarboximide	C		0/5	25	-4.5 +1.0	7	4	1 inj/day 50 mg/K toxic
1917	Cyclohexane, -Δ-1,2,3,4,5,6-hexachloro-	AE		3/10	500	-2.0 0.0	13	6	
1918	Cyclohexane propionic acid	CG		1/5	65	-3.5 -2.5	7	4	75 mg/K toxic
1919	Cyclohexanevaleric acid	CG		2/5	25	-2.5 -2.0	6	4	50 mg/K toxic
1920	Cyclohexanone sodium bisulfite	M		0/5	500	-1.5 -1.0	13	1	
1921	Cyclohexene-4-carboxylic acid	AA		3/10	50	-2.5 -1.0	7	4	1 inj/day
1922	3-Cyclohexeh-1-yl methyl ketone	CG		2/5	100	-2.5 -0.5	5	4	
1923	p-Cyclohexyl anisole	CG		0/5	750	-0.5 -0.5	13	2	
1924	N-Cyclohexyl-1,4-methylene-tetrahydrophthalimide	AP		1/5	256	+6.0 +3.5	11	3	512 mg/K toxic
1925	Cyclooctanecarboxylic acid, methyl ester	CI		0/5	750	+1.5 +4.0	13	6	
1926	Cyclopentanone sodium bisulfite	M		0/5	700	-0.5 -0.5	13	2	
1927	Desoxycholic acid	C		0/5	30	+2.5 +3.5	13	4	60 mg/K toxic
1928	4,4'-Diamidino diphenoxy pentane	B		0/5	32	-1.0 0.0	13	1	64 mg/K toxic

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1929	2,4-Diamino-6-(p-aminophenyl) amino-s-triazine	BJ		2/5	250	+5.0 / +0.5	7	3	1 inj/day
1930	2,4-Diamino-6-(5-arsono-2'-hydroxyanilino)-s-triazine . HCl	C		2/5	24	+1.0 / +0.5	10	3	
1931	2,4-Diamino-6-benzyl-s-triazine	L	m. > 255	0/5	125	+6.0 / +1.0	13	3	250 mg/K toxic
1932	2,4-Diamino-6-di-(β-hydroxyethyl) amino-s-triazine	M	m. 204	0/5	600	+0.5 / -0.5	13	2	
1933	4,4'-Diamidinodiphenoxy propane . 2HCl	D		0/5	15	+0.5 / 0.0	13	1	30 mg/K toxic
1934	4,4'-Diamidinodiphenyl ether diisethionate	B		0/10	15	-2.5 / 0.0	13	1	25 mg/K toxic
1935	2,5-Diamino-1,3,4-thiadiazole . HCl	C		0/5	750	-0.5 / +1.0	13	1	
1936	2-(4,6-Diaminotriazine)-m-phenyl sulfonic acid	W		1/5	250	+0.5 / -0.5	11	3	500 mg/K toxic
1937	α-(4,6-Diamino-2-s-triazinyl mercapto) acetamide	C		2/5	500	-1.5 / -1.0	13	2	
1938	2,6-Dibenzoylamino-s-triazine	CC		2/10	150	-2.5 / -0.5	12	2	300 mg/K toxic in gum acacia
1939	Dibenzoylethylene methylimine	CX		0/5	125	-1.0 / +0.5	12	5	250 mg/K toxic
1940	6,8-Dibromo-3-(N,N-di-n-butyl carbamyl) coumarin	AQ		0/5	600	+0.5 / -1.0	10	3	
1941	6,8-Dibromo-3-(N,N-diethyl carbamyl) coumarin	AQ		1/5	600	+1.0 / -1.0	12	3	
1942	3,5-Dibromo-4-hydroxyphenyl acetic acid	C		0/5	125	-0.5 / -1.0	12	4	2 inj/day 250 mg/K toxic
1943	2,4-Dibromophenol	CG		0/5	50	-0.5 / +0.5	13	2	100 mg/K toxic
1944	p-α-Dibromo-β-1-piperidyl propiophenone . HBr	C		2/5	24	-1.5 / -0.5	12	2	

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1945	α,β-Dibromosuccinic acid			1/5	125	+1.0 / -1.5	11	3	250 mg/K toxic
1946	Dibutyl chlorophosphate	DB		2/5	6	-4.0 / -2.5	7	5	1 inj/day 12 mg/K toxic
1947	Dibutyl hydrogen phosphite	DB		0/5	125	-2.5 / -2.0	7	5	1 inj/day 250 mg/K toxic
1948	x,x-Di sec-butyl phenol	CG		1/10	10	-3.0 / -1.5	7	4	16 mg/K toxic
1949	4,5-Dicarboximide cyclohexene	AP		2/5	250	-2.0 / +1.0	13	4	
1950	4-Dicarboxymethylene thioarsenoso-2-aminophenol, glucose bisulfite addition compound, trisodium salt	C		0/5	125	+0.5 / +0.5	13	1	250 mg/K toxic
1951	2,4-Dichlorobenzaldehyde	C		0/5	75	-2.0 / -0.5	13	4	125 mg/K toxic
1952	3,5-Dichloro-2-biphenylyl acetate	CG		1/5	500	-2.5 / -2.0	7	5	1 inj/day
1953	1,1-Dichloro-2,2-bis(p-bromophenyl) ethylene	AE		1/5	250	0.0 / 0.0	13	5	500 mg/K toxic
1954	Di-(2-chloroethyl)-2-chloroethane phosphonate	L		1/5	100	-3.0 / -1.0	7	4	125 mg/K toxic
1955	Di-(2-chloroethyl) ethylene phosphonate	L		1/5	125	-2.5 / -1.0	7	4	175 mg/K toxic
1956	2,6-Dichloroindophenol, monosodium salt	C		0/5	50	-2.0 / -2.0	13	1	
1957	Dichloro bis phenol-A diacrylate	AA	m.120	0/5	512	-2.0 / -1.5	7	5	fresh daily
1958	dl-(2,4-Dichlorophenoxy) succinic acid	Q		0/5	75	-0.5 / -1.0	7	4	150 mg/K toxic
1959	1-(2,4-Dichlorophenyl)-2-(2-quinolyl) ethanol	CY	m.138	0/5	500	-2.0 / 0.0	13	2	
1960	1-(2,6-Dichlorophenyl)-2-(2-quinolyl) ethanol	CY	m.156	1/5	500	+0.5 / 0.0	13	2	

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1961	1-(3,4-Dichlorophenyl)-2-(2-quinolyl) ethanol	CY	m. 154	2/5	350	-1.0 / 0.0	12	2	
1962	2,3-Dichloroquinoxaline	BA		3/10	63	+5.0 / +1.5	13	3	
1963	3,5-Dichlorosalicylicaldehyde	E		2/10	500	0.0 / -1.5	13	2	
1964	α,α-Dicyano-β,β-dimethyl glutarimide	AP		0/5	500	-0.5 / -0.5	13	3	750 mg/K toxic
1965	Di-(α-cyano-o-hydroxy benzal)-p-phenylenediamine	E		1/5	750	0.0 / +0.5	13	2	
1966	N,N-Dicyclohexyl-α-thiocyanoacetamide	AP		1/5	500	+1.5 / +2.0	13	2	
1967	3,4-Diethoxybenzaldehyde sodium bisulfite	M		0/5	700	-0.5 / +1.5	13	1	
1968	3,4-Diethoxybenzoic acid	C		2/5	256	0.0 / 0.0	13	3	512 mg/K toxic
1969	p-Diethylamino benzaldehyde thiosemicarbazone	D		2/5	15	+1.5 / 0.0	13	3	25 mg/K toxic
1970	N-(Diethylaminomethyl) benzamide . HCl	C		2/5	750	+1.5 / +1.5	12	2	
1971	2-(2-Diethylaminoethylthio)-4,5-diphenylthiazole . HCl	Z		0/5	40	-1.5 / -0.5	13	4	60 mg/K toxic
1972	O,O'-Diethyl chloro thiophosphate	M		1/5	100	-2.5 / 0.0	13	5	125 mg/K toxic
1973	Diethyl cyanamide	M		0/5	32	-2.0 / 0.0	13	5	2 inj/day 63 mg/K toxic
1974	Diethyl-α,α'-dibromoadipate	W		0/5	400	+2.0 / +4.0	13	2	500 mg/K toxic
1975	Diethyl butanephosphonate	DB		0/5	500	-2.0 / -1.5	13	1	
1976	Diethyl N,N-diethylamidophosphate	L		0/5	75	-2.0 / 0.0	13	4	2 inj/day 125 mg/K toxic

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1977	O,O'-Diethyl dithio phosphoric acid	M		0/5	62	-3.0 / -1.0	12	4	75 mg/K toxic
1978	Diethyl ethanephosphonate	DB		0/10	500	-2.0 / -0.5	13	1	
1979	α,α-Diethylhydracrylic acid	DC		0/5	600	-2.5 / -2.0	13	3	
1980	Diethylthiocarbamyl chloride	AA		0/5	500	+1.0 / +1.5	13	2	
1981	Diethylmethyl-/3-(triphenylplumbyl)-propyl/ ammonium methyl sulfate	C ; ZB		0/5	12	-1.5 / -1.5	13	1	24 mg/K toxic
1982	Diethyl phenylmethanephosphonate	DB		2/5	100	-3.0 / -4.0	7	5	1 inj/day
1983	10-Diethyl thiocarbamyl phenothiazine	BP		0/5	600	+4.5 / -1.5	13	3	
1984	Diethyl trichloroacetyl phosphate	DB		0/5	16	-2.5 / -4.0	7	5	1 inj/day 32 mg/K toxic
1985	Diheptyl dicyandiamide	M		0/5	3	+0.5 / 0.0	7	4	10 mg/K toxic
1986	Dihydro quercetin	C		0/5	250	+2.0 / +1.0	11	4	2 inj/day 500 mg/K toxic
1987	Dihydro streptomycin sulfate	BB		1/5	1000	-1.5 / -2.5	13	1	
1988	3,4-Dihydroxybenzaldehyde	C		1/5	128	+6.0 / -1.0	11	3	256 mg/K toxic
1989	2,2'-Dihydroxy-5,5'-diamylphenyl sulfide	AP		0/5	125	0.0 / 0.0	13	4	250 mg/K toxic
1990	2,2'-Dihydroxy-5,5'-di tert-amylphenylsulfide mono phosphate			1/5	128	+4.5 / +1.5	11	3	256 mg/K toxic
1991	2,4-Di-(β-hydroxyethylamino)-5-methyl pyrimidine	AW7		1/5	500	+4.0 / 0.0	11	3	1000 mg/K toxic in CMC
1992	γ-(1,1-Dihydroxyethyl) γ-methylpimelic acid, dilactone	Q		0/5	500	+0.5 / 0.0	13	2	

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1993	N-(α, γ-Dihydroxy-β-methylpropyl) dichloroacetamide	W		0/5	600	+0.5 / +1.0	13	2	
1994	3,5-Dihydroxy-6-methyl-1, 2, 4-triazine	BE		0/5	750	-3.0 / -2.0	13	1	
1995	2,4-Dihydroxy-5-thiazole acetic acid	C		1/5	750	+0.5 / +0.5	13	3	
1996	2,5-Diketo-6-carbethoxypiperazine	W		0/5	500	0.0 / -0.5	13	2	
1997	Dimer of indalone	IA		0/5	750	+0.5 / 0.0	13	2	
1998	1,4-Dimethane sulphonyl oxybutane	BE		2/5	50	-2.5 / +1.0	13	6	75 mg/K toxic suspension
1999	1,4,5,8-Dimethanonaphthalene, 1, 2, 3, 4, 10, 10-hexachloro-6,7-epoxy-1, 4, 4a, 5, 6, 7, 8, 8a-octahydro-	AE		1/5	6	-3.5 / -4.0	7	5	12 mg/K toxic
2000	Dimethylaminoethoxy methyl benzyl pyridine succinate	Z		0/5	125	+0.5 / +2.5	13	1	250 mg/K toxic
2001	2-(2-Dimethylaminoethylthio)-4, 5-diphenylthiazole . HCl	Z		2/5	500	+3.5 / +1.5	13	3	
2002	2-Dimethylamino-4, 6-bismethylamino-s-triazine	M		1/5	32	+1.0 / +1.5	10	5	63 mg/K toxic
2003	2-(4-Dimethylaminostyryl) quinoline	M		0/10	500	+3.5 / +1.0	13	3	
2004	2,2-Dimethylaziridine	EC		0/5	5	-1.5 / -1.5	7	4	10 mg/K toxic
2005	1-(3,5-Dimethyl-4-chlorophenoxy) 3-propanol	DC		2/5	35	-3.5 / -2.0	7	4	
2006	N, N-Dimethyl-N'-(3,4-Dimethoxybenzyl)-N'-lepidyl ethylene diamine	DQ		0/5	15	-1.0 / -1.0	7	4	1 inj/day 25 mg/K toxic
2007	N-Dimethyl diphenyl acetamide	C		2/5	65	-1.0 / 0.0	6	4	1 inj/day
2008	γ, γ-Dimethylglutaraldehydic acid	Q		0/5	50	-1.0 / -1.0	7	4	100 mg/K toxic

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2009	Dimethylol melamine	M		0/5	600	-3.0 / -1.5	7	1	1 inj/day suspension
2010	Dimethyl piperidyl acetal	DQ		0/5	100	+0.5 / -1.5	12	4	125 mg/K toxic
2011	β-(4,5-Dimethyl-2-thiazolyl) mercaptopropionic acid	AA		0/5	700	-0.5 / +0.5	13	1	
2012	4,5-Dimethyl-2-thiono-4-thiazoline-3-acetic acid	AA		0/5	500	-0.5 / 0.0	13	1	
2013	2,4-Dimethyl-6-thio-1,3,5-thiadiazane	AP		1/5	128	+2.0 / +1.5	13	3	256 mg/K toxic
2014	Diphenylacetic acid	C		0/5	500	+1.5 / +0.5	13	2	
2015	Diphenyl bis (p-azomalononitrile)	AW5		0/10	500	-0.5 / -1.5	12	2	
2016	2,2-Diphenyl-5-(N-piperidino)-4-pentanolactone . HCl	J		3/10	65	-3.0 / -3.0	7	4	
2017	N,N'-Diphthalimido sulfide	AP		2/5	400	-2.0 / -0.5	12	2	
2018	N,N'-Disalicylidene-1,2-diamino ethane	Q		0/5	500	-1.5 / +0.5	13	2	also negative in gum acacia
2019	N,N'-Disalicylidene-1,2-diaminopropane	Q		0/5	500	-2.0 / -2.5	7	5	2 inj/day also negative
2020	Disalycylal-m-phenylene diamine	E		0/5	600	-1.5 / +0.5	13	2	
2021	Disodium 1,2-dihydroxyethane-1,2-disulfonate	M		0/5	500	+0.5 / -0.5	13	1	
2022	Disodium-2-sulfolactate	M		0/5	700	0.0 / +1.5	13	1	
2023	Disulfuric ester of 1-chloroanthraquinone, di potassium salt	M		0/5	700	-2.5 / -1.0	11	1	suspension
2024	Disulfuric ester of 2,5-ditert-butylhydroquinone, disodium salt	M		1/10	500	-0.5 / +1.0	13	1	

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2025	Dithiobiuret	BP		1/5	100	+3.0 / +0.5	13	3	150 mg/K toxic
2026	1,4-Dithiocyano-2-butene	AP		2/5	750	-0.5 / -2.0	12	1	
2027	Dithioammelide	M		0/5	125	+4.0 / +1.5	13	3	250 mg/K toxic
2028	Di-p-tolyl mercury	C		1/5	750	+1.0 / +1.5	13	2	
2029	1,3-Di (p-toloxy)-2-propanol	C		0/5	750	0.0 / +0.5	13	2	
2030	2-Dodecyl imidazole	L		2/5	125	+1.0 / 0.0	10	3	2 inj/day 250 mg/K toxic
2031	Dowanol 122. 2,2'-isopropylidene bis (p-phenyleneoxy) diethanol	CG		0/5	500	-3.0 / -2.5	7	5	1 inj/day 2 inj/day also negative
2032	1,2-Epoxy-1,1-diphenyl ethane	C ; ZB		2/5	300	-4.0 / -2.0	6	5	
2033	tris-(9,10-Epoxy) glyceryl tristearoate	EC		1/10	500	+0.5 / -3.0	7	5	
2034	o-Ethoxybenzaldehyde sodium bisulfite dihydrate	M		0/5	750	-2.0 / -1.5	13	1	
2035	p-Ethoxybenzoic acid	C		0/5	500	-1.5 / 0.0	13	2	
2036	α-(Ethoxymethyl) benzyl acetate	CG		1/10	500	-1.5 / -2.0	7	5	1 inj/day
2037	5-(Ethoxymethyl)-2-methyl-4-pyrimidol	D		1/10	500	+3.0 / -1.0	12	3	
2038	2,2-bis (p-Ethoxyphenyl)-1,1,1-trichloroethane	DN		0/5	500	+0.5 / -1.0	13	2	
2039	2-(o-Ethoxystyryl) quinoline . HCl	M		1/5	700	-1.5 / -4.0	13	6	
2040	Ethyl acetoacetate			0/5	500	-3.0 / -2.0	7	5	1 inj/day

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2041	Ethyl borate			0/5	700	-3.0 / -1.5	7	5	
2042	γ-Ethyl-γ-n-butyl-$\Delta^{\alpha,\beta}$-butenolide	AZ		2/10	500	-2.5 / -4.0	6	5	
2043	N-(3-Ethyl-4,5-dimethylthiazolinyl)-4,5-dimethyl thiazolo-2-sulfenimide	AA		0/5	125	-1.5 / -2.0	13	2	250 mg/K toxic
2044	3,3'-Ethylene bis /5-(o-acetoxybenzylidene)/ rhodanine	EC		2/10	500	-1.5 / -0.5	13	2	
2045	Ethylene, 2-chloro-1,1-bis-(p-chlorophenyl)-	CI		0/5	600	-2.0 / -0.5	13	2	
2046	N,N'-Ethylenebisformamide	CI		0/5	750	-0.5 / -1.5	13	1	
2047	Ethylene glycol dichlorocarbonate	AA	b.123 35 mm.	0/5	30	0.0 / 0.0	13	4	63 mg/K toxic
2048	Ethylene oxide, 1-benzoyl-2-phenyl-	C	m.91	2/5	500	+1.0 / -1.0	13	3	also negative fresh daily in saline suspension
2049	Ethyl ethoxy methylene malonate	E		0/5	165	-2.0 / -3.0	7	4	250 mg/K toxic
2050	1,1,6,6-tetrakis (Ethyl formate)-3-hexyne	EC		0/5	700	-0.5 / -1.0	13	6	
2051	Ethylidene di (3-hydroxyphenyl) ether	E		0/5	500	-1.5 / -1.0	13	2	
2052	N-ethylmorpholine sulfite	M		0/5	700	0.0 / +3.0	13	1	
2053	X-Ethyl-2-phenyl phenol	CG		2/5	500	-3.5 / -2.0	6	5	
2054	2-Ethyl-3-propyl acrolein	BV		1/10	500	-2.5 / -2.5	7	5	1 inj/day
2055	3-Ethynyl-1,1,2,2-tetrafluorocyclobutane	Q		1/5	50	-3.5 / -3.0	7	5	125 mg/K toxic
2056	Fastusol turquoise blue LGLA	M		0/5	125	+1.5 / +0.5	13	1	250 mg/K toxic

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2057	2-Fluorene, 4-(2'-acetylamino thiazolyl)-	F	m. 302	0/10	500	+2.0 / +2.5	11	3	
2058	Fluorene, 2-acetyl-7-bromo-	F		2/10	500	-1.0 / -1.5	11	3	
2059	Fluorene, 2-benzoyl-	F	m. 122	1/10	500	+1.5 / -1.5	11	3	
2060	Fluorenehydantoin	F	Sinters >280	1/5	1000	+2.0 / +2.5	13	3	
2061	9-Fluorenol-2-carboxylic acid	F	m. 240	3/10	250	+3.0 / -0.5	11	3	
2062	Fluorenone	F	m. 83	3/10	250	+2.0 / +1.0	13	3	
2063	Fluorenone, 2-acetyl-	F	m. 154	3/10	300	+1.5 / +2.5	11	3	
2064	Fluorenone, 2-benzoyl-	F	m. 175	0/5	500	+1.0 / -1.5	11	3	
2065	Fluorenone oxime	F	m. 195	0/5	250	+0.5 / 0.0	11	3	300 mg/K toxic
2066	2-Fluorenephenylcarbinol	F	m. 115	1/10	500	+2.0 / +0.5	11	3	
2067	Fluorene, 2-thiocyano-	C		1/5	150	+2.0 / -0.5	13	3	250 mg/K toxic
2068	3-Fluoroanisaldehyde sodium bisulfite	AW5		1/5	600	-1.5 / +0.5	13	2	
2069	Formanilide	M		0/5	500	-1.5 / +1.0	13	1	
2070	o-Formotoluide	CI		0/5	125	-2.0 / -2.0	7	4	1 inj/day 250 mg/K toxic
2071	4-Formyl-1-phenol-2-sulfonic acid, sodium salt	C		0/5	500	-1.0 / +1.0	13	1	
2072	2-Furoic acid butyl ester	D		0/5	125	-0.5 / +3.0	13	4	250 mg/K toxic

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2073	d-Glaucine	EI		2/5	175	-1.0 / 0.0	11	2	
2074	Glucuronolactone	AR		0/5	1000	+1.0 / -1.5	13	1	
2075	dl-Glyceraldehyde acetal	M		0/5	700	-1.5 / -1.5	7	4	
2076	Glycimide of disulfo-4-amino naphthalic anhydride	M		0/5	700	+1.5 / +1.5	13	1	
2077	Glycouril	Z		1/5	500	-2.0 / -1.0	13	2	
2078	Guaiacol, 6-allyl-	AE		0/5	100	0.0 / -1.5	7	5	1 inj/day 250 mg/K toxic
2079	Guanazoguanazole	Z		2/5	700	+1.5 / -1.5	13	3	
2080	Gum acacia			2/10	5000	+1.5 / -0.5	13	1	
2081	2-Heptadecyl-4,4-bis (hydroxymethyl)-2-oxazoline	AR		0/5	600	-1.0 / -0.5	13	2	
2082	2-Heptadecyl-4,4-bis (stearoxymethyl) oxazoline	AR		0/5	750	-0.5 / -0.5	13	2	
2083	2-Heptadecyl-4-methyl-4-hydroxymethyl-2-oxazoline	AR		1/5	125	-1.0 / 0.0	13	4	250 mg/K toxic
2084	2,2,3,3,4,4,4-Heptafluoro-1,1-butanediol	C ; ES		1/5	750	-0.5 / -0.5	13	1	
2085	Hexadecylguanidine . HBr	H		2/5	4	-2.0 / -2.0	6	4	10 mg/K toxic
2086	1,1,2,2,3,4-Hexafluoro-3,4-dichlorocyclobutane	Q	b.60	0/5	2500	-2.0 / -1.0	13	6	
2087	Hexahexyltetraphosphate	AP		2/10	25	-3.0 / -4.0	6	5	50 mg/K toxic
2088	Hexahydro-1,3,5-tris acetyl-s-triazine	CC		0/5	750	-2.0 / -1.0	7	4	1 inj/day

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2089	Hexahydro-1,3,5-tris acrylyl-s-triazine	AA		0/5	4	-0.5 / 0.0	7	1	1 inj/day fresh suspension
2090	Hexahydro-5-methyl-s-triazine-2-one	W		2/10	500	+0.5 / 0.0	13	3	also negative in saline
2091	α,α'-(Hexamethylenedinitrilo) di-o-cresol, copper (II) complex	Q		0/10	500	-2.0 / -2.5	13	2	
2092	Hexamethoxymethyl melamine	M		0/5	600	-3.0 / -1.5	13	1	suspension
2093	2,4,6-Hexamethyl-s-trithiane	AP		2/5	500	-4.5 / -2.0	6	5	1 inj/day
2094	Hexane, 4,4'-diamidinodiphenoxy, .2HCl	B		2/5	32	0.0 / +2.0	9	2	
2095	x-(x-Hexyl) phenol	CG		4/10	18	-3.0 / -1.0	7	4	
2096	6-Hydrazino-1-naphthol-3-sulfonic acid	C		0/5	750	0.0 / -0.5	13	1	
2097	7-Hydrazino-1-naphthalene sulfonic acid	C		1/5	750	-1.5 / -2.0	11	2	
2098	Hydrazodicarbamide	E		0/5	150	0.0 / -0.5	12	3	200 mg/K toxic in CMC
2099	Hydroquinone derivative	D		0/5	12	-3.5 / +0.5	12	2	
2100	p-Hydroxyacetophenone	CG		1/5	750	-0.5 / +0.5	13	2	
2101	o-Hydroxybenzaldehyde thiosemicarbazone	BE		0/5	750	+0.5 / +1.0	13	2	
2102	4-Hydroxybenzene arsonic acid, sodium salt	C		0/5	300	-1.5 / +0.5	13	1	500 mg/K toxic
2103	4-Hydroxybenzophenone	E		3/10	500	0.0 / +2.0	12	2	
2104	2-Hydroxybenzylideneaniline	DN		0/5	500	0.0 / -1.0	13	2	

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2105	1-Hydroxybenzylidene-4-ethoxyaniline	DN		0/5	500	-1.0 / -1.0	13	2	
2106	2-Hydroxy-5-chlorobenzaldehyde thiosemicarbazone	BE		0/5	750	0.0 / +1.0	13	2	
2107	γ-Hydroxy-γ,γ-diphenyl butyric acid, γ-lactone	C		0/5	700	+1.5 / +1.5	13	2	
2108	4-Hydroxy-3,4-diphenyl-2-cyclopenten-1-one	CI		2/5	750	+0.5 / +1.0	13	2	
2109	4-β-Hydroxyethoxy-2-hydroxybenzenearsonic acid	C		2/5	175	-1.0 / -1.0	5	4	1 inj/day
2110	N-(2-Hydroxyethyl) acetamide	CG		0/5	750	-0.5 / -1.5	7	4	
2111	α-(2-Hydroxyethyl) acetoacetic acid, γ-lactone	C		1/5	700	-3.0 / -2.0	7	4	
2112	4-(β-Hydroxyethylamino) N-butyl naphthalimide	M		1/5	100	+3.5 / 0.0	13	3	125 mg/K toxic
2113	N-[4,6-bis (2-Hydroxyethylamino)-s-triazin-2-yl] arsanilic acid, monosodium salt	C		0/5	600	-1.5 / -1.0	13	1	
2114	N-(2-Hydroxyethyl) formamide	CG		0/5	750	-1.5 / -0.5	7	4	
2115	1-β-Hydroxyethyl-2-heptadecylimidazoline	AA		0/5	15	0.0 / -2.0	7	4	1 inj/day 25 mg/K toxic
2116	(4-Hydroxy-5-isopropyl-2-methyl phenyl) trimethyl ammonium chloride 1-piperidine carboxylate	I1		0/5	0.3	-2.5 / -2.0	13	1	0.5 mg/K toxic
2117	1,3,4,6-tetrakis (Hydroxymethyl)-2,5-diketoimidaz [d] imidazolidine	EC		1/10	500	-2.0 / -1.5	13	1	
2118	4-Hydroxy-4-methyl-2-pentanone, oxime	C		0/5	750	-1.5 / -1.5	13	1	
2119	2-Hydroxy-3-methyl quinoxaline	E		2/5	200	-1.0 / +0.5	12	2	
2120	Hydroxymethyl tert-butyl peroxide	CJ		0/5	750	-0.5 / -1.5	13	1	

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2121	3-Hydroxy-2-naphthoic acid	C		0/5	30	-2.5 / -2.0	13	4	2 inj/day 60 mg/K toxic
2122	γ-(o'-Hydroxyphenyl)-o-hydroxy propiophenone			0/5	32	-2.0 / 0.0	13	4	50 mg/K toxic
2123	2-(o-Hydroxyphenyl) pyridine	M		0/5	750	-0.5 / 0.0	7	4	
2124	3-Hydroxy-2-phenylquinoline	AW5		0/5	500	+4.5 / +1.0	13	2	also negative in gum acacia
2125	3-Hydroxy-2-phenylquinoline-4,8-dicarboxylic acid	AW5		1/5	600	-2.5 / 0.0	13	2	
2126	m-Hydroxypropiophenone	CG		0/5	500	-1.0 / -1.0	11	2	750 mg/K toxic
2127	p-Hydroxypropiophenone			0/5	500	-0.5 / +1.0	13	3	
2128	α-Hydroxy-γ-valero-lactone	C		1/10	500	-1.5 / +2.5	13	5	
2129	2-Imidazolidone	EC		0/15	500	-1.5 / +0.5	13	1	
2130	2-Imino-3-anilino-10-phenylphenazine	D		1/5	63	+1.5 / -0.5	13	3	125 mg/K toxic
2131	2-Imino-5,5'-dimethyl-3-phenyloxazolidine	M		0/5	63	-1.0 / -0.5	13	4	125 mg/K toxic
2132	2-Imino-3-phenyl-5,6-dimethyl-Δ^4-(1,3,4)-thiadiazine	AA		2/5	700	-1.0 / -2.0	12	2	
2133	2-Imino-3-phenyloxazolidine	M		0/5	8	+3.5 / +3.5	13	4	16 mg/K toxic
2134	Indole, 2-phenyl-	C	m. 175	1/5	500	+3.0 / 0.0	11	3	
2135	Inositol (meso)	AE	m. 225	0/5	1500	+0.5 / +0.5	13	1	
2136	Iodonium chloride, bis (2-bromo-4-chlorophenyl)-	AE		2/5	125	-3.5 / +0.5	9	3	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2137	Iodonium chloride, bis (2,4-dichlorophenyl)-	AE		1/5	50	-1.0 / +1.5	9	2	100 mg/K toxic in gum acacia
2138	Iodonium iodide, diphenyl-	AE		1/5	50	-2.5 / -1.5	13	3	100 mg/K toxic
2139	Iodonium sulfate, bis (p-bromophenyl)-	AE		0/5	25	-0.5 / +1.5	13	2	50 mg/K toxic
2140	Isatin-sodium bisulfite	M		0/5	700	+0.5 / +1.5	13	1	suspension
2141	Isobarbituric acid	BE		0/10	500	-0.5 / +0.5	13	1	
2142	Isonitrosoacetophenone (α-methylphenyl) hydrazone	D		1/10	500	0.0 / +0.5	13	2	
2143	α-Isonitrosopropiophenone	D		0/5	63	-1.0 / +1.5	7	4	125 mg/K toxic
2144	α-Isonitrosopropiophenone (α-methylphenyl) hydrazone	D		0/5	400	-1.0 / +0.5	13	2	
2145	Isonitrosopropiophenone thiosemicarbazone	D		0/5	300	+1.0 / -0.5	13	3	500 mg/K toxic
2146	γ-Isopropyl-$\Delta^{\alpha,\beta}$- butenolide	AZ		0/5	125	+1.0 / +1.0	13	4	
2147	α-Isopropylcaproic acid	CG		2/5	25	-2.0 / -0.5	6	4	50 mg/K toxic
2148	4,4'-Isopropylidene bis (2-chlorophenol) diacetate	CG		0/5	500	0.0 / +0.5	13	2	
2149	4,4'-Isopropylidene bis (2-phenylphenol)	CG		0/5	30	-2.0 / +0.5	13	4	2 inj/day 63 mg/K toxic
2150	Isopropenyl phenyl isocyanate	M		1/5	63	+2.5 / +2.0	13	6	75 mg/K toxic
2151	x-Isopropyl-2-phenyl phenol	CG		2/5	35	-3.0 / -1.0	7	4	65 mg/K toxic
2152	2-Keto-2,3-dihydroimidazo-(1,2α) pyridine . HCl	CI		0/5	750	-1.0 / -1.5	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2153	Ketone, trans-1-cyclohexyl-3-phenyl-2-aziridyl-p-tolyl-	CA		1/10	500	-3.0 / -1.5	7	5	
2154	Khellin	C		0/5	64	+2.0 / +1.0	13	3	128 mg/K toxic
2155	Kojic acid	AE	m. 152	0/5	500	-2.0 / -1.0	13	1	
2156	Koussein	D		1/5	125	-2.0 / +2.0	13	4	175 mg/K toxic
2157	Fluorene pinacol	F	m. 184	2/5	250	+1.0 / +1.0	13	3	
2158	Maleic acid anhydride	AP		0.5	50	-1.5 / +0.5	13	4	
2159	Malonamide			1/5	750	-1.5 / -1.0	13	2	
2160	Malonamidoamidine . HCl	AW7		0/5	750	-1.5 / -1.5	13	1	
2161	Malonylbenzylamide	E		0/5	750	0.0 / 0.0	13	2	
2162	Mandelic acid	C		0/5	30	+0.5 / -2.0	13	3	2 inj/day 36 mg/K toxic
2163	2-Mercapto benzothiazole	M	m. 177	2/5	128	+0.5 / +1.0	11	3	256 mg/K toxic
2164	3-Mercapto-5-hydroxy-6-phenyl-1, 2, 4-triazine	BE		1/5	500	-1.0 / -1.0	12	2	600 mg/K toxic
2165	2-Mercaptoimidazoline	AA		0/5	700	-2.5 / 0.0	13	1	
2166	2-Mercapto-4-methyl benzothiazole	AA		1/5	500	-1.0 / -1.0	13	2	also negative in gum acacia
2167	Mercaptosuccinic acid	C		2/5	500	-1.5 / +1.0	13	1	
2168	1-Methallyl-4-methyl-2-piperidone	L		1/10	85	-2.0 / -1.0	7	5	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2169	4,4'-Methylene bis (2-bromoacetanilide)	CG		0/5	250	-1.0 / 0.0	13	2	500 mg/K toxic
2170	6-Methoxy-8-(5-isopropylaminoamylamino) quinoline	BM		0/5	32	0.0 / +1.5	13	1	
2171	6-Methoxy-8-(4-isopropylamino-1-methylbutylamino) quinoline	BM		2/5	25	-1.5 / +0.5	13	1	
2172	6-Methoxy-4-methylcarbostyril	C		2/5	750	-0.5 / 0.0	12	2	
2173	p-Methoxypropiophenone	CG		2/10	500	-3.0 / -2.0	7	4	
2174	2-/bis (2-Methylallyl) amino/ 4,6-diamino-s-triazine	EC		1/5	750	-1.5 / 0.0	13	2	
2175	2-Methylamino-4-dimethylamino-6-chloro-s-triazine	C		0/5	250	-1.5 / -1.0	13	3	350 mg/K toxic in CMC
2176	Methylaminomethanesulfonic acid	EJ		0/5	600	-1.0 / -1.0	13	1	
2177	2-Methyl-2-n-amyl-4-hydroxymethyl-1,3-dioxolane	DC		1/5	50	-2.5 / -2.5	7	4	1 inj/day
2178	9-Methyl anthracene	E		2/10	500	-1.5 / -2.0	13	2	
2179	bis (α-Methylbenzyl) ether	CG		0/5	700	-2.5 / -1.0	13	6	
2180	x-(α-Methylbenzyl) phenol	CG		0/5	100	+0.5 / +1.0	13	2	200 mg/K toxic
2181	x-α-Methylbenzyl)-2-phenylphenol	CG		1/10	25	-1.5 / -0.5	7	4	
2182	1-Methyl-2,5-diketopyrrole	EC		1/5	2	+1.0 / 0.0	13	2	4.5 mg/K toxic
2183	5-Methyl-2,3-diphenyl indole	C		0/5	300	-0.5 / -1.0	7	4	500 mg/K toxic
2184	Methyl ester of 2-benzothiazolyloxyacetic acid	M		1/5	750	-1.5 / -0.5	12	2	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2185	Methyl ethyl ketone-sodium bisulfite	M		0/5	750	-0.5 / -1.5	13	1	
2186	Methyl gentisate	CG		2/5	400	-1.5 / +1.5	11	2	
2187	2-Methyl-4-hydroxy-5-isopropylbenzenesulfonic acid	C		1/5	500	+1.5 / +1.5	13	2	
2188	4-Methyl-2-hydroxyquinoline			2/5	125	+2.5 / -0.5	12	3	250 mg/K toxic
2189	Methyl 4-keto-penten-2-oate	AU	m. 63	1/5	50	+4.0 / +4.0	11	1	100 mg/K toxic
2190	2-Methylmercapto-2-imidazoline . HI	C		1/10	300	-3.5 / -1.0	13	1	
2191	2-Methyl-1, 4-naphthohydroquinone diphosphoric ester tetrasodium salt (Synkayvite)	AJ		2/10	500	-2.5 / 0.0	13	1	
2192	5-Methyl-5-naphthyl hydantoin	M		0/5	500	0.0 / 0.0	13	2	also negative in gum acacia
2193	6-Methyl-3-(α-phenylethylimino) 1, 2H-pyran-2, 4 (3H) dione	CG		0/5	750	-0.5 / -0.5	13	2	
2194	6-Methyl-1, 2H-pyran-2, 4 (3H) dione	CG		0/5	700	-0.5 / +1.0	13	2	
2195	N-Methylquinolone	C		0/5	125	-2.5 / +0.5	13	4	175 mg/K toxic
2196	Methyl silicate	AE	b. 119	2/5	8	+4.0 / +3.5	11	3	
2197	6-Carbomethoxy-3-methyl-1, 2, 3, 6-tetrahydrophthalic anhydride	AA		1/5	300	+3.5 / 0.0	12	3	500 mg/K toxic
2198	Methylvanillin thiosemicarbazone	D		2/10	500	0.0 / +0.5	12	2	
2199	Methyl-2, 3, 5-triiodobenzoate	E		0/5	700	-2.0 / -0.5	12	2	
2200	Monochlorodiamino-s-triazine	BJ		2/5	200	-2.0 / -1.5	13	1	fresh daily

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2201	Mono-β-(β-hydroxyethoxy) ethyl sulfate, trisethylamine salt	M		1/5	250	0.0 -1.0	7	4	500 mg/K toxic
2202	Monosulfuric ester of polyethylene glycol 300, triethylamine salt	M		3/10	500	-2.0 -3.0	7	4	
2203	Monosulfuric ester of polyethylene glycol 1000, triethylamine salt	M		0/5	700	+1.0 +3.0	13	1	
2204	1,4-bis (N, N'-Morpholino) 2-pentyne	EC		1/10	500	-0.5 -1.5	7	4	
2205	Morpholinylacetone	EC		0/5	500	-1.5 -3.0	7	4	750 mg/K toxic
2206	3-(4-Morpholinylmethyl)-2-thiazolidinethione	C ; BV		0/5	500	-2.0 0.0	11	3	750 mg/K toxic in CMC
2207	Naphthalic anhydride	C		1/5	500	-3.5 +0.5	10	2	
2208	Narcotine	AC	m. 176	0/5	500	-2.5 -2.0	13	1	
2209	Nickel chloride			0/5	16	-1.5 -1.0	13	1	32 mg/K toxic
2210	Nicotinonitrile	M		0/5	500	-0.5 +0.5	13	1	700 mg/K toxic
		M		2/5	500	0.0 0.0	13	2	also negative in gum acacia
2211	Nile blue A chloride	M		0/5	60	-1.0 0.0	13	3	125 mg/K toxic
2212	2-Octadecyl cyclopentanone semicarbazone	AP		0/5	500	0.0 0.0	11	2	
2213	Octadecyl guanidine . HBr	H		2/5	5	-1.5 -2.0	6	4	15 mg/K toxic
2214	N-(n-Octadecyl) oleamide	I2		2/10	500	-0.5 -1.0	12	2	
2215	Octanal-sodium bisulfite	M		0/5	750	-1.0 -1.0	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2216	Octanone-2-sodium bisulfite	M		0/5	600	-2.5 / 0.0	11	2	
2217	p-Octanoylphenol	M		1/5	32	-1.0 / +1.0	7	4	
2218	Organic phosphate systemic insecticide	EM		0/5	1	-2.0 / -1.5	7	4	2 mg/K toxic
2219	9-Oxo-4-fluorene arsonic acid monosodium salt	C ; F		0/5	32	0.0 / 0.0	13	1	64 mg/K toxic
2220	2-Oxonipecotamide	C		0/5	700	+1.0 / -0.5	13	1	
2221	4-Oxo-2-thionothiazolidine-5-acetic acid	AA		0/5	700	+1.0 / +0.5	13	1	
2222	2,2'-Oxybisethane sulfonic acid, sodium salt	CI		0/5	750	-1.0 / -1.5	13	1	
2223	Penta acetyl gluconamide	AW5		1/5	500	-0.5 / +0.5	13	2	
2224	Pentachloro phenyl acetate	AA		2/5	125	+3.5 / +1.0	13	3	250 mg/K toxic
2225	Pentachlorotoluene	AA		1/5	600	+1.0 / -0.5	13	2	
2226	Pentane, 2, 2'-dibromo-4, 4'-diamidinodiphenoxy . 2HCl	B		0/5	20	+0.5 / -0.5	13	3	32 mg/K toxic
2227	Phenacylbenzoate	E		0/5	500	+1.5 / +2.0	13	2	
2228	Phenarsazine chloride	DW		1/5	9	-3.0 / -0.5	9	2	
2229	Phenol, p-methoxy-	C		1/5	64	+3.0 / -1.5	11	3	128 mg/K toxic
2230	Phenyl acetate	CG		1/5	250	-2.0 / -0.5	7	5	1 inj/day 500 mg/K toxic
2231	p-Phenylacetophenone	C		0/5	250	+6.5 / +3.5	13	3	500 mg/K toxic

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2232	1-Phenyl-3 (2-benzoxazolylamino)-5-pyrazolone	E		2/5	250	+0.5 / -1.0	12	2	
2233	2, 2'-p-Phenylenebis /4, 4-dimethyl-5-(4H) oxazolone/	Q		0/10	500	-2.0 / -2.0	13	2	
2234	14-Phenyl-dibenz (a, j) acridan	AA		0/5	750	0.0 / -0.5	13	2	
2235	N-(3-Phenyl-4, 5-dimethyl thiazolinyl)-4, 5-dimethyl-thiazolo-2-sulfenimide	AA		2/5	700	+1.0 / -0.5	11	2	
2236	4-Phenyl-1, 3-dioxane	AA		0/5	100	-3.0 / -1.0	13	4	200 mg/K toxic
2237	α-Phenylethyl trichloroacetate	AP		0/5	500	-2.5 / -2.0	7	5	1 inj/day
2238	Phenyl hydrazine p-sulfonic acid	M		0/5	500	-0.5 / -0.5	13	2	also negative in gum acacia
2239	1, 2-bis (Phenyl mercapto) ethane	C		1/15	500	-0.5 / +1.0	13	2	
2240	β-(Phenyl mercapto) propionic acid	C		0/5	63	+1.0 / +1.5	13	4	2 inj/day 125 mg/K toxic
2241	4-Phenyl-2-mercaptothiazole	AA	m. 168	0/5	128	+3.0 / 0.0	13	3	256 mg/K toxic
2242	Phenylmercuric nitrate	Z		1/5	2	+3.0 / -0.5	11	3	4 mg/K toxic
2243	1-Phenyl-6-methoxy-7-benzyloxy-3, 4-dihydroisoquinoline	EI		2/5	500	-2.0 / -0.5	12	2	
2244	α-Phenyl-α-methyl succinic acid	C		1/10	500	-2.5 / -2.0	12	2	
2245	α-Phenyl-β-methyl succinic acid	C		0/5	700	-0.5 / +0.5	13	1	
2246	α-Phenyl-β-(4-morpholinyl) ethanol	CY	m. 81	2/5	175	-3.0 / -2.0	6	4	
2247	β-Phenyl propiophenone	AA		0/5	750	+1.0 / +0.5	13	2	

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2248	1-Phenyl-2, 2-quinolyl ethanol	CY	m. 131	0/5	500	0.0 / -1.5	13	3	750 mg/K toxic in CMC
2249	1-Phenyl-2-sulfo-1, 3, 4, 5-tetrazole, potassium salt	E		1/5	600	-1.5 / -0.5	13	2	
2250	2-Phenyl-3, 4, 5, 6-tetrahydrobenzoic acid	EH		2/5	750	-0.5 / 0.0	11	2	
2251	Phosphorylated hesperidin	CT		0/5	750	0.0 / -2.0	13	1	
2252	Phthalaldehyde	W		0/5	3	-3.5 / -2.0	7	4	6 mg/K toxic
2253	Phthalimide, N-/p-(chloromethyl) phenyl7-	CI		0/5	600	-2.0 / +0.5	13	2	
2254	α-Phthalimido-3, 4-dimethoxypropiophenone	C	m. 212	0/5	500	+1.0 / +2.5	13	2	also negative in gum acacia
2255	2-Phthalimidoethyl benzoate	AR	—	0/5	700	-0.5 / -0.5	13	2	
2256	Phthaloyl acetone	AP		0/5	8	+2.0 / +1.0	13	3	16 mg/K toxic
2257	α-Phthaloyl quinaldine	C		2/5	700	0.0 / +2.5	10	2	
2258	1-Piperidinelactic acid, β-phenyl-	CA		0/5	750	0.0 / -1.5	13	1	
2259	2-Piperidinecarboxylic acid	C		0/5	500	-0.5 / -0.5	13	1	
2260	Pyridine-2, 3-dicarboxylic acid	C		0/5	750	-1.5 / +1.0	13	1	
2261	N-Piperidinomethylmandelamide	C		2/5	125	-1.5 / 0.0	7	4	1 inj/day
2262	1-(β-Piperidylethyl)-3, 5-diamino-s-triazine	M		2/5	32	+1.0 / +1.5	13	3	50 mg/K toxic
2263	5-Piperonylidene-3-trichloromethylthio-2, 4-thiazolidinedione	EC		1/5	300	-2.5 / -1.5	11	2	500 mg/K toxic

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2264	Potassium arsenite			0/5	16	+1.0 / +1.5	13	1	32 mg/K toxic
2265	Propane, 2-bromo-4,4-diamidinodiphenoxy . 2HCl	B		2/5	25	-1.5 / -1.5	7	4	1 inj/day
2266	2-Propene-1,1-diol, 2-methyl-, diacetate	AE		0/5	35	-0.5 / -0.5	7	4	
2267	Propionhydroxamic acid	AR		0/5	500	-1.0 / +0.5	13	1	
2268	Propiophenone, α-hydroxy-β-phenyl-β-1-piperidyl-, acetate	CA		0/5	500	0.0 / +0.5	13	2	
2269	Propiophenone, α-hydroxy-β-phenyl-β-(1,2,3,4-tetra-hydro-2-isoquinolyl)-acetate	CA		2/5	500	+1.0 / +0.5	13	2	
2270	Propiophenone, α-iodo-β-methoxy-β-phenyl-	CA		1/5	500	+1.0 / +0.5	12	2	
2271	n-Propyl isome	S		0/10	512	-2.0 / -1.5	13	6	
2272	3-Pyridol	CG		1/10	500	-1.0 / -1.0	13	2	
2273	2-Pyrolidone	C		1/10	500	-1.5 / -1.5		4	
2274	N-(2-Pyridyl)-N-/(2-dimethylamino) ethyl/-1,2-diphenylethyl amine	DQ		0/5	30	0.0 / +0.5	11	4	50 mg/K toxic
2275	Quercitrin	S		2/5	500	-0.5 / -1.5	6	4	
2276	2,4-(1H,3H) Quinazoline dione	CG		0/5	600	-0.5 / +1.5	13	2	
2277	Quinoline, 2-/2,2-bis (p-dimethylaminophenyl) ethyl/-	AE		0/10	500	-0.5 / +0.5	13	3	
2278	Quinoline, 1,2,3,4-tetrahydro-6-methoxy-	AE		0/5	100	-2.5 / -0.5	13	5	
2279	Resatophenone	C		1/5	75	+0.5 / -0.5	13	3	125 mg/K toxic

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2280	Riboflavin			1/5	500	-2.0 / -1.0	13	1	
2281	Rimocidin	BB		1/5	30	-1.0 / +0.5	11	2	
2282	Salicylic acid, 3-propenyl-	CI		1/5	32	-1.5 / +0.5	9	4	50 mg/K toxic
2283	Saponin	D		1/5	25	-2.0 / -1.0	7	1	suspension 60 mg/K toxic
2284	Sodium anilino-N-methylene sulfoxylate	AW5		3/10	500	-3.0 / -2.5	7	5	1 inj/day
2285	Sodium benzenoneindo-3'-methyl-6'-iso-propylphenol	AN		0/5	31	-1.5 / -1.0	7	4	75 mg/K toxic
2286	Sodium chloride			0/5	1000	-0.5 / -2.0	13	1	
2287	Sodium 3-cyanoguanidino methyl sulfonate	M		0/5	700	0.0 / -1.5	13	1	
2288	Sodium formaldehyde sulfoxylate			0/5	750	-0.5 / 0.0	13	1	
2289	Sodium 2-hydroxy-3-carbethoxy-propane-2-sulfonate	M		0/5	600	-0.5 / -1.5	13	1	
2290	Sodium hydroxy-p-methoxyphenyl methane sulfonate	M		0/5	600	0.0 / -1.5	13	1	
2291	Sodium 1-hydroxytetradecane-1-sulfonate	M		2/5	700	-2.5 / 0.0	10	6	
2292	Sodium thioglucose	BT		0/5	750	0.0 / +0.5	13	1	
2293	bis Stearyl thio ethane	E		0/5	500	-0.5 / -1.0	13	6	
2294	2-Styrylpyridine	M		0/5	64	-1.5 / 0.0	13	4	125 mg/K toxic
2295	2-Styrylquinoline	M		3/10	500	+1.0 / -1.5	12	2	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2296	4-Styrylquinoline	M		2/5	750	-4.0 / -1.5	7	4	
2297	Succinyl chloride	AE		1/5	10	-3.5 / -2.5	7	5	
2298	Sulfuric acid dimorpholide	M		0/5	500	+1.0 / +3.5	7	4	1 inj/day
2299	Taurine	AE		0/5	700	-1.0 / -1.0	13	3	
2300	4-o-Terphenamide	E		0/5	600	+3.0 / +4.0	13	2	
2301	o-Terphenyl disulfonic acid, potassium salt	E		0/5	700	-1.0 / 0.0	13	1	
2302	o-Terphenyltrisulfonic acid, potassium salt	E		0/5	600	-0.5 / -0.5	13	1	
2303	4-o-Terphenylyl isocyanate	E		0/5	600	+1.5 / +1.5	13	2	
2304	Tetrabutyl hexamethylene diphosphonate	DB		0/5	40	-1.0 / -2.0	7	5	1 inj/day 75 mg/K toxic
2305	3,4,5,6-Tetrachloro-N-(1-methylheptane) phthalimide			1/5	256	+3.5 / 0.0	11	3	512 mg/K toxic
2306	Tetradecyl succinic acid	E		0/5	65	-1.5 / -1.0	7	4	100 mg/K toxic
2307	Tetra (2-ethylbutyl) trimethylene diphosphonate	DB		1/5	12	-2.5 / -2.0	5	5	1 inj/day 25 mg/K toxic
2308	Δ^3-Tetrahydrobenzaldehyde-sodium bisulfite	M		0/5	500	+2.0 / +1.5	13	2	
2309	1,2,3,4-Tetrahydro-4-(3,4-dimethoxyphenyl) 3-(hydroxymethyl-6,7-dimethoxy) 2-naphthoic acid morpholide	DP		0/5	500	+1.0 / +1.0	13	2	also negative in gum acacia
2310	Tetrahydrofurfuryl alcohol, p-toluene sulfonate	C ; E		0/5	750	-2.0 / -1.0	7	5	1 inj/day
2311	1,2,3,6-Tetrahydro trans-3-methyl-cis-phthalic acid	AA		1/5	500	+3.5 / +1.0	10	3	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2312	bis /p-(1,1,3,3-Tetramethylbutyl) phenyl/ ether	CG		0/5	500	+3.5 / +4.0	13	6	
2313	2,2'-Tetramethylene bis /4,4-dimethyl-5-(4H)-oxazolone/	Q		0/10	500	-1.0 / -1.5	13	2	
2314	Tetraphenyl arsonium bromide	D		0/5	1.5	-3.5 / -2.5	7	4	2 mg/K toxic
2315	Tetra (3,5,5-trimethylhexyl) trimethylene diphosphonate	DB		0/5	500	-2.0 / -2.0	7	5	1 inj/day
2316	Tetramethylol phenylmelamine	M		1/5	600	-1.0 / -1.5	6	1	1 inj/day suspension
2317	Thallium nitrate			0/5	5	-0.5 / -1.5	13	1	16 mg/K toxic
2318	2-Thenoic acid amyl ester	D		0/5	700	-2.0 / -1.5	7	5	
2319	β-/N-(2-Thiazolyl) N-benzyl/ aminoethyl morpholine	DQ		1/5	60	-3.0 / -1.0	7	4	125 mg/K toxic
2320	N-(2-Thiazolyl)-N-benzyl-N',N'-diethyl ethylenediamine	DQ		1/5	15	-3.0 / -1.0	7	4	35 mg/K toxic
2321	N-(2-Thiazolyl)-N-(α,β-diphenyl) ethyl-N',N'-dimethyl ethylenediamine	DQ		1/10	25	-3.0 / -1.0	7	4	
2322	Thiochromanone	AA	m.29	1/10	250	-1.5 / -0.5	7	4	1 inj/day 500 mg/K toxic
2323	Thio-β-naphthol	AA		1/5	64	+7.0 / +1.0	13	3	128 mg/K toxic
2324	Thiophene	BG		1/25	500	0.0 / +1.0	13	4	also negative in peanut oil
2325	2-Thiophenealdehyde thiosemicarbazone	D		1/5	500	+0.5 / +0.5	12	2	
2326	2-Thiophenecarboxylic acid	AE		0/5	750	+0.5 / +1.0	10	1	
2327	Thiophene, 2,3,4,5-tetrachloro-	AE		0/10	65	+1.5 / +1.5	13	6	100 mg/K toxic

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2328	Thiophene, tetra-4-pyridyl-	AE		0/5	100	+0.5 / -2.0	10	3	125 mg/K toxic
2329	Thiophene trimer	AE		1/10	500	-1.5 / -1.5	13	6	750 mg/K toxic
2330	Thiosemicarbazide	Q		1/5	16	+2.5 / 0.0	6	3	1 inj/day fresh daily
2331	Thiosemicarbazone of cinnamaldehyde	BE		0/5	65	+2.0 / +2.5	13	2	130 mg/K toxic
2332	Thiosemicarbazone of ethyl benzoyl formate	BE		0/5	750	+0.5 / +1.0	13	2	
2333	Thiosemicarbazone of pyruvic acid	BE		1/5	500	-0.5 / 0.0	13	2	
2334	1-Thiosorbitol	C		0/5	750	-1.0 / +1.0	13	1	
2335	Thymatic acid	C		0/5	25	-2.5 / -1.0	7	4	1 inj/day 50 mg/K toxic
2336	p-Toluic acid	C		0/5	250	+5.0 / -2.0	9	3	
2337	4-p-Toluidino-6-(3',5'-disulfobenzoylamino)-1,3-diazabenzanthrone	E		0/5	500	-1.0 / -1.0	12	2	
2338	Toluylene red, neutral red	AN		2/5	125	-2.5 / -1.0	12	1	
2339	2,2-bis (p-Tolyl) 1,1,1-trichloroethane	DN		1/5	350	+5.0 / 0.0	12	3	
2340	1,3,5-Triacetyl benzene	E		0/5	600	-1.5 / 0.0	13	2	
2341	2,4,6-Triallyloxy-s-triazine	M	m. 29	2/5	200	-2.5 / -0.5	9	4	300 mg/K toxic
2342	N, N', N''-Triaminoguanidine . HCl	M		0/5	600	+0.5 / -0.5	13	1	
2343	v-Triazole-4,5-dicarboxylic acid	BL		1/10	65	-2.5 / -1.5	13	1	

ENTRY NO.	COMPOUND NAME	COM-POUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2344	Tri (2-benzthiazole) trithiophosphorous acid	AP		0/5	128	+8.0 -1.0	13	3	256 mg/K toxic
2345	o-Trichloroacetylaminophenol	C		0/5	30	-1.5 0.0	13	4	2 inj/day 65 mg/K toxic
2346	1,2,4-Trichloro benzene	AE	b.213	0/10	125	-1.5 -1.0	13	6	175 mg/K toxic
2347	3,5,x-Trichloro-2-biphenylyl acetate	CG		0/5	750	-2.5 -2.0	7	5	1 inj/day
2348	di (β,β,β-Trichloroisobutyl) thionothiophosphate	AP		2/5	35	-2.0 -1.5	6	4	
2349	2-Trichloromethyl-1,3-dioxane	DN		2/5	250	-3.0 -0.5	11	4	2 inj/day
2350	2-Trichloromethyl-4,5-dimethyl-1,3-dioxolane	DN		2/5	250	-2.0 -0.5	10	4	2 inj/day
2351	2-(2,4,5-Trichlorophenoxy) ethanol	CG		0/5	100	-2.5 -1.5	7	5	1 inj/day 200 mg/K toxic
2352	bis [2-(2,4,6-Trichlorophenoxy) ethyl] ether	CG		1/5	700	-0.5 0.0	13	2	
2353	x,2,4-Trichloro-6-phenyl phenol	CG		0/5	750	+1.0 +0.5	13	2	
2354	1,1,2-Trichloro-1,2,2-trifluoroethane	Q	b.48	0/5	500	-1.0 -1.0	13	6	
2355	Tricyclo [4.2.2.$O^{2,5}$] 3,9-decadiene-7,8-dicarboxylic acid, dimethyl ester	CI		1/5	500	+1.0 +0.5	13	2	also negative in gum acacia
2356	Tridione	W		0/5	500	+2.0 +1.5	13	1	1000 mg/K toxic
2357	Tridodecyl phosphate	AP		1/10	500	-2.0 -4.0	6	5	
2358	Triethylphosphonoacetate	C		0/5	500	0.0 +2.0	13	4	700 mg/K toxic
2359	α,α,α-Trifluoroacetophenone	C		0/5	50	-4.0 -3.5	7	5	1 inj/day 125 mg/K toxic

ENTRY NO.	COMPOUND NAME	COMPOUND SOURCE	PHYSICAL CONSTANT	NO. OF DEATHS	DOSE mg/K/day	AV. WT. CHANGE IN GRAMS treated/controls	NO. OF INJECTIONS	VEHICLE	REMARKS
2360	N-/Tri (hydroxymethyl) methyl/ β-dichloroacetamide	W		0/10	500	-0.5 / -1.0	13	1	fresh daily
2361	2,4,6-Tri /iso-amyloxy/-s-triazine	W		0/5	750	-1.5 / 0.0	13	6	
2362	3,4,5-Trimethoxybenzoic acid	E	m.165	2/10	512	+3.5 / +2.5	11	3	
2363	α-Trimethyl isopatulin			0/5	500	-0.5 / -0.5	13	2	
2364	Tri (n-octyl) phosphate	AA		1/5	500	-2.5 / -1.5	7	4	1 inj/day
2365	Triphenyl guanidine salt of o-terphenyl-4-sulfonic acid	E		0/5	600	+1.5 / +1.5	13	2	
2366	Trypan blue	AN		0/5	32	+3.5 / -0.5	13	3	65 mg/K toxic
2367	Trypan red	AN		0/5	32	+4.5 / +2.5	13	3	64 mg/K toxic
2368	9-Undecylenic acid	C		0/5	700	-0.5 / -1.5	13	1	
2369	2-Undecyl-4-methyl-4-hydroxymethyl-2-oxazoline	AR		0/5	500	0.0 / +2.0	13	4	750 mg/K toxic
2370	p-Urazine	E		2/5	200	-0.5 / +1.5	10	2	
2371	Urea, propionyl-	AE		0/5	512	+1.5 / +1.0	11	3	
2372	Vanillin-sodium bisulfite	M		0/10	500	-0.5 / -0.5	13	1	
2373	6,6'-Vinylene bis (N-benzoylmetanilic acid)	C ; E		0/5	125	-1.0 / 0.0	11	1	200 mg/K toxic
2374	1-Vinyl-2-pyrrolidone	CI		2/5	125	-2.0 / -1.5	7	4	

EMPIRICAL FORMULA INDEX OF COMPOUNDS

(Name Index for Other Materials)

The decision against a standardized nomenclature for the compounds included in this supplement has increased the need for an index. As various individuals are familiar with different systems of nomenclature, and some with none, it has been decided to use an empirical formula index as probably the most useful one. In the index the compounds have been listed as the parent acid or base. For economy of space and time for preparation of the manuscript, the subscripts for the numbers of atoms have been typed on the same line with the symbols for the elements. Thus, sodium acetate would be listed as C2 H4 O2 (Na) rather than $C_2H_3O_2Na$. After the organic compounds, the inorganic compounds and then the alphabetical list of materials without formulas are presented.

Organic Compounds

FORMULAS	ENTRY NOS.
C 3	
C3 H8 N4 O2	597
C3 H8 O3 (C23 H30 Cl N3 O S)	928
C3 H8 O7 S2 (2Na)	1737
C 4	
C4 Cl2 F6	2086
C4 Cl4 S	2327
C4 H2 Cl2 N2	1601
C4 H2 Cl2 O2 (C6 H8 N2 O2 S)	1014
C4 H4 N2 O (Na)	1414
C4 H2 N2 O4 (C6 H6 Cl N O2 S)	903
C4 H2 N4 O3	512
C4 H2 O4	2158
C4 H3 Br N2 O2	804, 856
C4 H3 Cl N6	41
C4 H3 F7 O2	2084
C4 H3 N O2 S	202
C4 H3 N O8 (3Na)	1027
C4 H3 N3 O4	836, 876, 2343
C4 H3 N5 O2	507, 515, 47
C4 H4 Br2 O4	1945, 177
C4 H4 Cl N O2	1895
C4 H4 Cl N5 O2	42
C4 H4 Cl2 O2	2297
C4 H4 Cl2 O2 (C6 H8 N2 O2 S)	1017
C4 H4 Cl2 O3 (C6 H8 N2 O2 S)	1015
C4 H4 Cl2 O4	2047
C4 H4 N2	1415
C4 H4 N2 (C13 H11 Br O)	765
C4 H4 N2 O2	595, 1356, 889 891, 975
C4 H4 N2 O2 S	1023
C4 H4 N2 O3	2141, 1578
C4 H4 N6	1185, 225, 36
C4 H4 N6 O	651, 510, 51
C4 H4 N6 O (C H4 O3 S)	517
C4 H4 N6 S (HCl)	885
C4 H4 O	960
C4 H4 O4	1353
C4 H4 S	2324
C4 H5 Cl O2	1742
C4 H5 N (C6 H6 Cl N O2)	910
C4 H5 N S	96
C4 H5 N3	164, 33
C4 H5 N3 O	887
C4 H5 N3 O S	399
C4 H5 N3 O2	34, 59, 1994, 802, 853
C4 H5 N3 O3	1624
C4 H5 N7	513, 45
C4 H6 N2 O2	576, 1359
C4 H6 N4 O2	2077
C4 H6 N4 O3	899
C4 H6 N8	2079
C4 H6 O	78
C4 H6 O2	1344
C4 H6 O2 S	119
C4 H6 O4	723
C4 H4 O4 (C17 H22 N2 O)	2000
C4 H6 O4 S	2167
C4 H6 O6 [(C20 H25 N3 O2)2]	978
C4 H7 Cl O (C6 H8 N2 O2 S)	1012
C4 H7 Cl O2	1875
C4 H7 N O	2273

FORMULAS	ENTRY NOS.
C 4	
C4 H7 N O2	937
C4 H7 N3	1576
C4 H7 N3 O2 S	2333
C4 H8 Cl N2 (HCl)	1876
C4 H8 N2	1134
C4 H8 N2 O2	2371, 2046
C4 H8 N2 S	1690, 728
C4 H8 N2 S (HI)	2190
C4 H8 N3 O5 P (Ca) (4 H2 O)	665
C4 H8 N4 O2	324, 438
C4 H8 N4 O3 S	1251
C4 H8 O (Na H S O3)	2185
C4 H9 N	2004
C4 H9 N O2	626, 2110, 643 1294
C4 H9 N O2 S	1173
C4 H9 N O4	1456
C4 H9 N3 O	2090
C4 H9 N3 O2	664, 1167
C4 H10 Br N (HBr)	113
C4 H10 Cl N (HCl)	114
C4 H10 Cl O2 P S	1972
C4 H10 N2 O2 (HCl)	329, 442
C4 H10 N2 S	1710
C4 H10 O2	1844
C4 H10 O6 S (C6 H15 N)	2201
C4 H10 O7 S2 (2 Na)	2222
C4 H11 N O2	108
C4 H11 N O4 S	1136
C4 H11 O2 P S2	1977
C4 H11 O4 P	1836
C4 H12 N (C5 H11 N S2)	1262
C4 H12 N^+ I^-	1020
C4 H12 O4 S^+ I^-	2196
C 5	
C5 H Br2 O4	454
C5 H2 Cl2 N4 O	1551
C5 H2 Cl2 N4 O (C6 H8 N2 O2 S)	1018
C5 H3 N O4	635
C5 H4 Cl N5 O	1541
C5 H4 N2 O4	60
C5 H4 N4 O	685, 122
C5 H4 N4 O2	1567, 514
C5 H4 N4 O3	846
C5 H4 N4 S2	1556
C5 H4 N4 S3	1558
C5 H4 N5 O3	504
C5 H4 O2	89
C5 H4 O2 S	2326
C5 H4 O3	154
C5 H4 O4 (Na)	487
C5 H5 N O	2272
C5 H5 N O2	2182, 153
C5 H5 N O3 S	637
C5 H5 N O3 S2	2221
C5 H5 N O4 S	1995
C5 H5 N3 O4	505
C5 H5 N5	1533, 797
C5 H5 N5 O	508, 509
C5 H5 N5 O2	1537
C5 H5 N6 O2	501
C5 H6 Cl6 O3	1719

FORMULAS	ENTRY NOS.
C 12	
C12 H13 Cl N4 O	1587
C12 H13 Cl N4 O2 S	1667
C12 H13 N O2	1781
C12 H13 $N2^{+}$ I^{-}	760
C12 H13 N3	1097, 1604
C12 H13 N3 O	1899
C12 H13 N3 O4 S2	249
C12 H13 N3 O4 S2 (Na)	1661
C12 H13 N5 O3 S	1808, 1809, 1811
C12 H13 N5 O3 S (1/2 Cu)	1810
C12 H14 $N2^{++}$ (2 Br^{-})	1091
C12 H14 N2 O	553
C12 H14 N2 O3	1178
C12 H14 N2 O4	7
C12 H14 N4	285, 417
C12 H14 N4 O (2 HCl)	286, 418
C12 H14 N4 O2	1671
C12 H14 N4 O2 S	1640, 1670
C12 H14 N4 O2 S (2 HCl)	444
C12 H14 N4 O4	1200
C12 H15 Cl O	1867
C12 H15 N3 O3	624, 2089, 2341
C12 H16 Cl N5	1741
C12 H16 F O Se^{+} Br^{-}	562
C12 H16 F O3 S^{+} Cl^{-}	580
C12 H16 N2 O	1400, 1763
C12 H16 N2 O4	1260, 1287, 1301
C12 H16 O3	2036
C12 H16 O4 S	2310
C12 H17 Cl N4 O S (HCl)	644
C12 H17 N O2	620, 762, 971, 973, 1292, 1306, 2246
C12 H17 N O2 S	10, 1177, 1512
C12 H17 N O3	618
C12 H17 N3 S3	2043
C12 H17 N4 O S^{+} Cl^{-}	844
C12 H18 N O^{+} Cl^{-}	1039
C12 H18 N2 O (HCl)	1970
C12 H18 N2 O4 S2	16
C12 H18 N4 O2	524, 1609
C12 H18 N4 S	1969
C12 H18 O	2095
C12 H18 O6	431, 493
C12 H19 N O	614, 615
C12 H19 N O2	347
C12 H19 N O8 P2 S	1511
C12 H19 N3 O S	546
C12 H21 Cl3 N3 O10 P	1470
C12 H21 N3 O2	1598
C12 H22 N4	1602
C12 H22 N4 O9	1266
C12 H22 O2	1843, 1915
C12 H22 O11	654, 696, 1008
C12 H23 N O (HCl)	585
C12 H24 N2 O4	1285
C12 H24 N2 O4 S2	23, 1514
C12 H25 N O2	1123
C12 H26 N4 O4	1715
C12 H26 O10 S (C6 H15 N)	2202
C12 H27 N O2	1139

FORMULAS	ENTRY NOS.
C 13	
C13 H6 Cl6 O2	124
C13 H6 N2 O6	1351
C13 H7 N O3	1450
C13 H8 Cl2 N4 O4 S	1217
C13 H8 N2 O2	327
C13 H8 N2 O4	1448
C13 H8 O	190, 2062
C13 H8 O4	334
C13 H9 As O4 (Na)	2219
C13 H9 Cl4 N	192
C13 H9 N	127
C13 H9 N O	1327, 2065
C13 H9 N O2	1474
C13 H9 N3 O6	364
C13 H10 N2 (C6 H12 O4)	1750
C13 H10 N2 O3	1423
C13 H10 N2 O6	1504
C13 H10 N2 S	1780
C13 H10 N4 O4 S	1234
C13 H10 O	916
C13 H10 O2	159, 2103
C13 H11 Br O	174
C13 H11 Br O (C4 H4 N2)	765
C13 H11 Cl N O^{+} Br^{-}	811
C13 H11 N	2294
C13 H11 N O	1357, 1798, 2104
C13 H11 N O2	350
C13 H11 N O4 S	270, 1656
C13 H11 N S2 (Na)	1316
C13 H11 N3 O	263
C13 H11 N5 O2 S	1664
C13 H12	348
C13 H12 Br N	1043
C13 H12 Cl N	1045
C13 H12 N $O2^{+}$ I^{-}	1088
C13 H12 N2	302
C13 H12 N2 O	385
C13 H12 N2 O2 S	1728
C13 H12 N2 O3	191, 251
C13 H12 N2 O4 S	1683
C13 H12 N2 S	1698
C13 H12 N4 O	427
C13 H12 N4 S	948
C13 H12 N6 O2 (H2 O)	1546
C13 H12 N6 O3	38, 1186
C13 H12 O2 S	1684, 1686
C13 H12 O6	1345
C13 H13 Cl2 N3 O	1127
C13 H13 N	260, 262, 351
C13 H13 N (HCl)	261
C13 H13 N O3	309
C13 H13 N O5	1147
C13 H13 N2 $O2^{+}$ Br^{-}	752
C13 H13 N3	1206
C13 H13 N3 O	947
C13 H14 N2	1418, 1580
C13 H14 N2 (HCl)	919
C13 H14 N2 O (HI)	457
C13 H14 N2 O3	294
C13 H14 N4 O	301

FORMULAS	ENTRY NOS.
C 14	
C14 H19 N O3	2258
C14 H19 N2 O4	1237, 1325
C14 H19 N3 S	945
C14 H19 N4 O^+ Br^- (HBr)	874
C14 H19 N5 O3	1564
C14 H20 N2 O2	2261
C14 H20 N2 O4	2313
C14 H20 N4 O S	848
C14 H20 O	1850
C14 H20 O2	2217
C14 H20 O3	1848
C14 H20 O8	208
C14 H21 N O2	1241, 1289
C14 H22 N2 O	737
C14 H22 N4	1610
C14 H22 N4 S4	1299
C14 H22 O	1846, 1948
C14 H22 O8 (2Na)	2024
C14 H23 O4 P S2	1346
C14 H24 N2 (HCl)	1111
C14 H24 O13 N2	1319
$(C14\ H25\ N\ O4)_x$	1121
C14 H27 N3 O4 (HCl)	1307
C14 H30 Cl N (HCl)	1381
C14 H30 O4 S (Na)	2291
C14 H31 N	340
C14 H32 N2	140
C 15	
C15 H8 O4	1332
C15 H9 Br3 O3	1368
C15 H9 N O2	1394
C15 H10 Cl N O2	2253
C15 H10 N2 O	307
C15 H10 N2 O2	2060
C15 H10 N2 O5	1361
C15 H10 O2	79, 2063
C15 H10 O3	80, 84
C15 H11 Br O	2058
C15 H11 N O	1363, 2124
C15 H11 N O2	354
C15 H11 N O3	875
C15 H12	2178
C15 H12 Cl N3 O2	1860
C15 H12 N2 O3	155
C15 H12 N2 O3 S	1727
C15 H12 N2 O5	678
C15 H12 N2 O7	1438
C15 H12 N2 S	1757
C15 H12 O	855
C15 H12 O2	2048
C15 H12 O3	2227
C15 H12 O3 (Na HSO3)	1347
C15 H12 O7	1986
C15 H13 Cl N O	712
C15 H13 Cl N2 S	1896
C15 H13 F3 N2 O3	1502, 1503
C15 H13 N O2	1796
C15 H13 N3	370
C15 H13 N3 O	1797
C15 H13 N3 O2	1790
C15 H13 N3 O2 S	485

FORMULAS	ENTRY NOS.
C 15	
C15 H13 N3 O6	1489
C15 H13 O2	1067
C15 H14 N2 O2	376
C15 H14 N2 O3	252
C15 H14 N2 O5	360
C15 H14 N2 O6	1455
C15 H14 N6 (HCl)	1812
C15 H14 N6 O3	1195
C15 H14 O	2247
C15 H14 O3	2122
C15 H15 N O2	1164, 1176, 1277, 1280, 2105, 1446
C15 H15 N O3	310, 1293
C15 H15 N3 O	2142
C15 H15 N3 O4	1484
C15 H15 N3 O6	1481
C15 H16 N2 O (HCl)	1104
C15 H16 N2 O4 S	1655
C15 H16 N2 S	1697
C15 H16 O	2151
C15 H17 Cl N4	2338
C15 H17 Cl2 N (HCl)	1378
C15 H18 N6	1230
C15 H19 Cl N4	1586
C15 H19 N O2	1924
C15 H19 N O3 (HCl)	1902
C15 H19 N O6	1254
C15 H20 Br N O2 (HBr)	1826
C15 H20 N2 O4 (HCl)	291, 420
C15 H20 N2 O5	2
C15 H20 N4 O2 S2	1677
C15 H20 O2	1739
C15 H21 Cl O	1878
C15 H22 N2 O4 S	14
C15 H23 N O2	1297
C15 H23 N5 O4 (HCl)	1554
C15 H24 N2 O S	1966
C15 H24 O6	145
C15 H25 N O2	1113
C15 H25 N2 $O2^+$ Cl^-	1246
C15 H25 N5	1545
C15 H27 N O2	1279
C15 H28 N2	2030
C15 H29 N O2	1244
C15 H30 N6 O6	2092
C15 H31 N O2	1276
C15 H32 N2 S	1696
C 16	
C16 H8 N2 O4 S	2017
C16 H9 Cl2 N O2	178
C16 H9 N5 O4 (Ni)	1216
C16 H10 N2	170
C16 H10 N4 O2	1531
C16 H12 Cl2 N4	1591
C16 H12 Cl6 O3	2352
C16 H12 N2 O	380
C16 H12 N2 O2	1310
C16 H12 N2 O3 S2 (Na)	1233
C16 H12 N2 O5	1507
C16 H12 N4 O2	2232
C16 H12 O3	85

FORMULAS	ENTRY NOS.
C 17	
$C_{17}H_{21}N_2^+I^-$	567
$C_{17}H_{22}N_2$	1050
$C_{17}H_{22}N_2O(C_4H_6O_4)$	2000
$C_{17}H_{23}NO$	612
$C_{17}H_{24}N_4O_2$	1713
$C_{17}H_{24}O_2$	1734, 1744
$C_{17}H_{25}NOS$	1265
$C_{17}H_{26}BrNO$	1112
$C_{17}H_{35}NS_2(Na)$	1315
$C_{17}H_{37}N_3(HBr)$	2085
C 18	
$C_{18}Cl_{10}O_4$	1342
$C_{18}H_{10}N_8$	2015
$C_{18}H_{12}Cl_3NO_2$	185
$C_{18}H_{12}N_6$	1525
$C_{18}H_{13}Cl_2NO_2$	186
$C_{18}H_{13}NO$	168
$C_{18}H_{13}NO_2$	1499
$C_{18}H_{13}NO_3$	2257
$C_{18}H_{13}N_5O$	852, 1517
$C_{18}H_{13}O_3S(C_{19}H_{18}N_3)$	2365
$C_{18}H_{14}BrNO_2$	184
$C_{18}H_{14}Cl_2N^+I^-$	1051, 1052, 1053
$C_{18}H_{14}Cl_2N_2O_4S_2$	1636
$C_{18}H_{14}N_2OS$	2057
$C_{18}H_{14}N_2O_3$	346
$C_{18}H_{14}N_6$	862, 1523
$C_{18}H_{14}N_6O$	1199
$C_{18}H_{14}O_2$	938
$C_{18}H_{14}O_4$	70
$C_{18}H_{14}O_6S_2$	409
$C_{18}H_{14}O_6S_2(2K)$	2301
$C_{18}H_{14}O_9S_3(3K)$	2302
$C_{18}H_{15}FNO^+Br^-$	824
$C_{18}H_{15}N_5O_7S_2$	1208
$C_{18}H_{16}N^+I^-$	1090
$C_{18}H_{16}NO_2^+I^-$	1084
$C_{18}H_{16}N_2O_2$	183
$C_{18}H_{16}N_4O_4S$	1641
$C_{18}H_{16}N_6O_{12}S_2$	1444
$C_{18}H_{16}N_8$	1520
$C_{18}H_{17}NO_2$	1125
$C_{18}H_{17}N_3O_3$	1085
$C_{18}H_{18}N_2O_{10}S_2(K)$	1366
$C_{18}H_{18}N_4O_4$	308
$C_{18}H_{18}N_4O_7S_3(Na)$	1662
$C_{18}H_{19}Cl_3O_2$	2038
$C_{18}H_{19}INO^+Br^-$	753
$C_{18}H_{19}NO_2(HCl)$	601
$C_{18}H_{19}NO_3$	193, 197, 701
$C_{18}H_{20}ClNO_2(HCl)$	1382
$C_{18}H_{20}Cl_2O_4$	1880
$C_{18}H_{20}N_2O_3$	2112
$C_{18}H_{20}N_2O_4$	583
$C_{18}H_{20}N_4^+2I^-$	592
$C_{18}H_{20}N_8O_6S$	816
$C_{18}H_{20}O_2$	669
$C_{18}H_{21}Br_2NO_3$	1940
$C_{18}H_{21}ClN_2O(HCl)$	976
$C_{18}H_{21}NO_2$	1115
$C_{18}H_{21}NO_3$	658
$C_{18}H_{21}N_4O^+Br^-$	758, 759, 835

FORMULAS	ENTRY NOS.
C 18	
$C_{18}H_{22}ClN(HCl)$	1126, 1143
$C_{18}H_{22}ClNO_2(HCl)$	1386
$C_{18}H_{22}NO_2^+I^-$	1055
$C_{18}H_{22}N_4$	566
$C_{18}H_{22}O_2$	675
$C_{18}H_{22}O_4$	673
$C_{18}H_{23}NO(HCl)$	579, 588, 1131
$C_{18}H_{23}N_2^+I^-$	744
$C_{18}H_{23}N_2O_2^+I^-$	1250
$C_{18}H_{23}N_2O_5S_2$	25
$C_{18}H_{24}N_2O_2$	1120
$C_{18}H_{24}N_2O_5S$	15
$C_{18}H_{26}ClN_3(2H_3PO_4)$	528
$C_{18}H_{26}N_2$	718
$C_{18}H_{26}O_8$	2050
$C_{18}H_{27}N_3O$	2170, 2171
$C_{18}H_{28}O_2$	1348
$C_{18}H_{30}O_6$	146
$C_{18}H_{31}NO$	1101
$C_{18}H_{32}O_{16}(5H_2O)$	713
$C_{18}H_{33}N_3O_3$	2361
$C_{18}H_{36}Cl_4N_2(2HCl)$	1390
$C_{18}H_{36}O_2(C_8H_8Cl_2N_2S)$	1693
C 19	
$C_{19}H_{11}N$	650
$C_{19}H_{12}ClN_3O_4S_2(Na)$	1637
$C_{19}H_{13}Cl_2NO_2$	187
$C_{19}H_{13}NO$	2303
$C_{19}H_{14}N_2O_3$	1466
$C_{19}H_{14}O$	173
$C_{19}H_{15}ClN_2O(HCl)$	237
$C_{19}H_{15}NO$	2300
$C_{19}H_{15}NO_2$	305
$C_{19}H_{15}NO_4(HCl)(H_2O)$	676
$C_{19}H_{16}N_2O(HCl)$	239
$C_{19}H_{16}N_2O(HCl)(CH_3OH)$	240
$C_{19}H_{16}N_6$	1529
$C_{19}H_{16}O_2$	211
$C_{19}H_{17}Cl_2N_7O_6$	1190
$C_{19}H_{17}NO(HCl)$	2039
$C_{19}H_{17}NO_2$	188
$C_{19}H_{17}NO_5$	2254
$C_{19}H_{18}Br_2N_8O_5$	1182
$C_{19}H_{18}Cl_2O_4$	2148
$C_{19}H_{18}IN_7O_6$	827
$C_{19}H_{18}N_2$	200
$C_{19}H_{18}N_3(C_{18}H_{13}O_3S)$	236
$C_{19}H_{19}NO_4$	653
$C_{19}H_{19}N_3$	384
$C_{19}H_{20}N_2O$	383
$C_{19}H_{20}N_2O_2$	406
$C_{19}H_{20}N_2S_2(HCl)$	2001
$C_{19}H_{20}N_8O_5$	102, 817
$C_{19}H_{21}BrNO^+Br^-$	1064
$C_{19}H_{21}ClN_5O_4^+Cl^-$	1046
$C_{19}H_{21}NO_2(HCl)$	1141
$C_{19}H_{21}NO_3$	727
$C_{19}H_{22}Br_2N_4O_2(2HCl)$	2226
$C_{19}H_{22}N_2$	1137
$C_{19}H_{22}N_2O$	1837
$C_{19}H_{23}N(HCl)$	621

Inorganic Compounds

Materials Without Empirical Formulas

days become hours

Think back to the time when you were completely dependent on manual methods for histologic processing. Tissue preparation that frequently took days to do then is now done in a matter of hours. Everybody's time is saved . . . technician's, pathologist's, surgeon's, patient's, and hospital's. Tissues come through faster and better — diagnosis is prompter. The working day becomes more productive.

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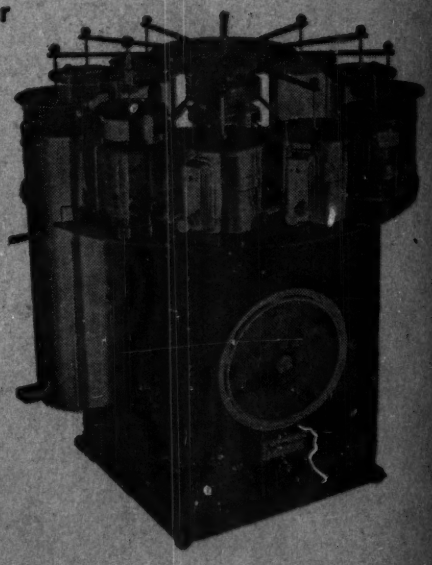

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Autotechnicon

automatic histologic preparation